

CITY OF



MANCHESTER



REPORT

on the

Health of the

City of Manchester

1971



CITY OF MANCHESTER

REPORT

on the

HEALTH

of the

CITY

of

MANCHESTER

for 1971


by the

MEDICAL OFFICER OF HEALTH

Health Department,
Town Hall,

Manchester, M60 2JS.

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Health Department,
Town Hall,
Manchester,
M60 2JS.
June 1972

MY LORD MAYOR, ALDERMEN
AND MEMBERS OF THE CITY COUNCIL,

I have pleasure in presenting my report on the health of the City for 1971.

The health of the city is good: The stillbirth and perinatal mortality rates are the lowest ever recorded, and the infant mortality rate is the second lowest for the City of Manchester. There were no maternal deaths, and this is a great achievement for the maternity and child health services.

There were no cases of poliomyelitis or smallpox, and it is of interest to note that the last case of poliomyelitis was in 1962 and the last case of smallpox in 1946. The number of cases of measles was the lowest on record. On the other side of the balance sheet, there was a large increase in the number of cases of acute meningitis and an outbreak of diphtheria in young children. There seemed to be no obvious epidemiological connection between the cases of meningitis except that most of them were caused by the ECHO virus, but the lessening in protection caused by a fall in immunisation was the principal factor in the diphtheria incident. This has now been remedied—71,627 schoolchildren were immunised in 1971, compared with 6,900 in 1970.

The diphtheria outbreak was exceptional, and a special section has been prepared for this Report. The control of the incident illustrates the amount of time, effort and money required to preserve the health of the community. In Manchester there are approximately 140,000 children under the age of fifteen, and the dangers of disease gaining a hold on this group are obvious. In addition, there is a threat to the adult population. Some details relating to the outbreak may be of interest: Health Department professional, administrative and clerical staff were involved in 1,700 hours of administration; there were 850 doctors' sessions, 1,100 nurses' sessions and 850 clerical sessions; 20 doctors were employed continuously on immunisation duties; 40 health visitors and nurses spent 2,000 hours on contact-tracing; and 10 public health inspectors spent 400 hours on epidemiological survey work. The total estimated cost to the Health Department was £9,000, but it was money well spent, as the outbreak, with all its potential danger, was extinguished exactly one month after it had been notified, and there were no secondary cases.

During 1971 immunisation against german measles was offered to school-girls in the city aged between $12\frac{1}{2}$ and 14, and of 6,936 eligible, 4,212 (60 per cent) were immunised.

The family planning service was developed vigorously during 1971, and clinics are now in operation in 22 child health centres and one hospital, and negotiations to provide the service in other hospitals are proceeding. A training course for doctors and nurses was established, and this gave detailed instruction in the practice and theory of family planning over a period of four days. This course attracted the interest of other local authorities, who sent staff to attend, and it will be repeated at regular intervals.

Substantial progress was made with the provision of the physical accommodation in which so much of the City's health services takes place : Brunswick Health Centre was in operation from April 1971, and Beswick Health Centre is due to open in August 1972 ; the Health Committee have approved plans for a further 9 Health Centres to be erected by 1976 ; and the Hulme Combined Clinic and the Public Analyst's Laboratory were completed during 1971.

In the sphere of joint effort, the St. Mary's Hospital General Practitioner Unit was opened in June 1971 by Her Majesty the Queen. In this unit general practitioners and hospital staff work with Local Authority domiciliary midwives to provide delivery and post-natal care to selected patients. A smaller unit, staffed by domiciliary midwives, was opened during the year in Crumpsall Hospital.

The School Health Service is satisfactory in most respects, and this year, for the first time, statistics relating to school health appear in this Report. The only incident of note was an outbreak of dysentery within a school with an attached residential unit. Because of the special difficulties of isolation inherent in a residential unit, the school had to be closed for a short period in order to eliminate the infection. There is a persisting shortage of full-time senior medical officers in the School Health Service, and this has a bearing on the amount of work carried out, but it is encouraging to note that the full establishment of speech-therapists and physiotherapists has been reached.

The review of the grading structure of the administrative and clerical staff was completed in 1971, and proposals for the reorganisation of the Health Department were approved by the City Council. The new management structure of the department has so far proved highly successful.

A productivity scheme, based on measured standard performances, for the Ambulance Service was approved during the year and was the first of its kind in the country. It provides for bonus earnings to all employees and nett savings to the Corporation.

Training for management forms an increasingly important part of the department's activities. Courses have been arranged for senior and middle-management staff, and introductory and preparatory courses for first-line management and junior staff. Senior medical and administrative staff will be prepared for the changes envisaged in the process of integrating the National Health Service.

1971 saw further progress in raising housing standards in the city. The number of houses surveyed for unfitness totalled 7,063, and of these, 5,864 were represented as being unfit. The number remaining in the current clearance programme is 5,060, and these will be surveyed in 1972. The first phase of the continuous appraisal of the housing stock of the city, carried out in the early summer, indicated that in the next ten years about 1,500 houses will become unfit. This forecast must be regarded as tentative as there are many factors which may result in larger numbers of houses becoming unfit. Further stages in this appraisal are about to be undertaken and should enable the department to make more precise forecasts. Although the present clearance programme will eliminate the remaining unfit houses, there will still remain many dwellings which cannot be regarded as being satisfactory or capable of satisfactory improvement. The inspections carried out in respect of qualification certificates have raised doubt as to the standard of maintenance of many houses, and a forthcoming house condition survey should establish a quantitative assessment of the extent of this problem.

During the year much interest has been shown nationally in the problems of environmental pollution, and it is encouraging to see at last wider recognition of problems to which the public health service has been directing attention for many years. As long ago as 1800 the predecessors of the present Health Committee were concerned with 'smoke' nuisances, and, ironically, the department during the year had to use powers under the Manchester Police Act 1844 to deal with a smoke nuisance outside the scope of the Clean Air Acts 1956–68.

The year began with smoke control orders in suspense, due to the shortage of solid smokeless fuels suitable for appliances originally intended to burn gas coke. This breach made in the domestic smoke control system has, as anticipated, proved difficult to close entirely. The mild winter meant that less coal was consumed in these areas than was feared, but the cost advantage of coal meant that clandestine use continued after the re-imposition of smoke control, and the department was for the first time compelled to take legal proceedings against coal merchants for supplying coal in smoke control areas. Following assurances that the supply of solid smokeless fuel was likely to be satisfactory, the Department of the Environment asked local authorities to review programmes with a view to accelerating smoke control. This has been done, in accordance with the Health Committee's wish that all the smoke control orders necessary to complete the programme be made within three years.

Atmospheric pollution is not the only pollution problem investigated by the department: noise, deposition of refuse, pollution of water and residual pesticides in food comprise some of the activities in which the department is involved.

In June the Chairman of the Health Committee opened the gypsy caravan site, which is managed by the Environmental Health Services Group. The operation of the site could prove to be sociologically important; it is disappointing, however, to find that illegal camping on grossly unsuitable sites continues in the City, and the Council's application for a designation order under the Caravan Sites Act 1968 has not so far been granted.

Manchester has a long tradition of pioneering activities in environmental health by means of private act powers. This tradition continued with the Manchester Corporation (General Powers) Act 1971, which contains many clauses of public health importance. Some of these merely extend or refine existing powers, but others are of more significance: control over noise, vibration and dust, and the prompt closure of insanitary food premises were granted for the first time to a local authority, and Manchester's experience will be used as a basis for national legislation.

The City Council reorganised its committee structure in 1970, and the Health Committee was joined to two other committees to form a Health and Protection Committee. Experience showed that this was not a suitable arrangement, and in 1971 the Health Committee reverted to its original status of an independent committee.

The members of the Health Committee have given most valuable support and encouragement throughout the year, and the staff of the department have shown once again their belief in the concept of public health.

KENNEDY CAMPBELL,
Medical Officer of Health

Statistical Summary

Population

The Registrar General estimates the civilian population for mid-1971 at 542,430, a decrease of 47,570 on 1970. This compares with the census figure of 661,791 taken in April, 1961.

Births

Registered live births numbered 8,930 (4,635 males, 4,295 females), giving a rate of 16.46 per 1,000 population compared with 15.96 in 1970. The rate for England and Wales was 16.0, the same as the previous year.

Of the 8,930 births, 7,228 (3,765 males, 3,463 females) were legitimate and 1,702 (870 males, 832 females) were illegitimate. The percentage of illegitimate births continued to rise, being 19.06 against 18.29 in 1970, an increase of 0.77.

There were 138 stillbirths (68 males, 70 females), a decrease of 9 on the previous year's figures, giving a rate of 15.22 per 1,000 total births. This was 0.15 lower than that for 1970 and 1.31 lower than 1969. The rate for England and Wales was 12.0, a decrease of 1.0.

The percentage of total registered births taking place in institutions was 89.70.

Deaths

The number of deaths registered during the year was 7,132 (3,670 males, 3,462 females) the lowest number ever recorded, giving a death rate of 13.15 per 1,000 of the population, as compared with 12.57 for 1970 and an average of 12.61 for the previous five years. The rate for England and Wales for 1971 was 11.6 a decrease of 0.1.

Deaths from all forms of tuberculosis numbered 35, one less than in 1970. Respiratory tuberculosis accounted for 31 deaths compared with 35 in 1970. The death rate from respiratory tuberculosis was 0.06 per 1,000 population compared with 0.02 for England and Wales. Other forms of tuberculosis were responsible for four deaths compared with 1 in 1970.

Deaths from all forms of cancer were 1,540 compared with 1,571 in the previous year. Deaths from cancer of the lung and bronchus increased by 9 to 506 (421 males, 85 females,) against 497 (407 males, 90 females) in 1970. The death rate from all forms of cancer was 2.84 per 1,000 population (2.66 in 1970) and that from cancer of the lung and bronchus 0.93 (0.84 in 1970) compared with 2.39 and 0.63 respectively for the whole of the country.

Deaths from bronchitis fell to 426, a rate of 0.79 per 1,000 population compared with 484 deaths (0.82 per 1,000 population) in 1970 and 602 deaths (1.01 per 1,000 population) in 1969.

Infant mortality

Deaths of infants under one year of age registered during the year numbered 210, 10 less than 1970, giving an infant mortality rate of 23.52 per 1,000 live

births, an increase of 0·16 compared with 1970. The rate for England and Wales for 1971 was 17·5.

The number of neonatal deaths was 134 giving a rate of 15·01 per 1,000 live births. The figures for 1970 in Manchester were 157 and 16·67, compared with 182 and 18·21 in 1969. The rate for England and Wales for 1971 was 11·6, a decrease of 0·4 in 1970. Early neonatal deaths decreased to 124 against 140 for the previous year and 166 in 1969 a rate of 13·89 per 1,000 live births, compared with 14·86 in 1970 and 16·61 in 1969.

Post-neonatal deaths increased to 76 compared with 63 in 1970 and 108 in 1969 the rates per 1,000 live births being 8·51, 6·69 and 10·80 respectively.

Perinatal deaths numbered 262 giving a rate of 28·89 per 1,000 total births (live and still) compared with 287 and 30·00 in 1970.

Maternal mortality

There were no maternal deaths compared with one death from abortion and a rate of 0·11 per 1,000 total births in 1970. There were no maternal deaths in 1969. The rate for England and Wales for 1971 was 0·17.

HEALTH COMMITTEE

In May 1971 the City Council approved a recommendation of the Policy Committee that a Health Committee and a Licensing and Fire Brigade Committee should be appointed for the year 1971–72 to discharge functions previously exercised by the Health and Protection Committee.

Members of the City Council who served on the Health and Protection Committee until May, 1971

The Lord Mayor

Chairman

Alderman Mrs. Nellie Beer, O.B.E., D.L., J.P.

Deputy Chairman

Councillor M. Flynn

Aldermen

P. Buckley, M.B., B.Ch.B., B.A.O.

H. Pigott, M.B., Ch.B.

H. Sharp

Miss L. Thomas, J.P.

Sir Robert Thomas, D.L., J.P.

Councillors

Mrs. S. D. Alexander

J. G. Birtles

K. Collis

J. Dean

E. Donoghue

J. Gilmore

T. O. Hamnett

D. G. Massey, T.D.

T. Mountford

Mrs. P. A. Nixon

Miss M. Pierce

B. H. Taylor

J. Taylor, J.P., M.B., Ch.B.

A. Williamson, M.B.E.

Members of the City Council who served on the Health Committee from May, 1971.

The Lord Mayor

Chairman

Alderman J. Taylor, J.P., M.B., Ch.B.

Deputy Chairman

Councillor T. O. Hamnett

Aldermen

J. G. Birtles

K. Collis

Miss L. Thomas, J.P.

Sir Robert Thomas, D.L., J.P.

Councillors

G. Conquest

J. Dean

E. Donoghue

N. I. Finley

M. Flynn

J. Gilmore

Mrs. J. D. W. Hill

L. J. Lamb

J. V. Marshall

G. M. Morton

C. B. Muir

Miss M. Pierce

P. A. Sless

Mrs. J. Taylor, J.P.

Miss M. A. Vince

Sub-Committees

The undermentioned Sub-Committees of the Health and Protection Committee served until the end of the 1970/71 municipal year:—

Legal Proceedings
Fire Brigade and Weights and Measures
Licensing
Estimates
Residential Homes

From May, 1971 the reconstituted Health Committee appointed the following Sub-Committees to carry out certain of the duties referred to the Committee:—

Legal Proceedings

The issue of certificates of disrepair and qualification certificates; the institution of legal proceedings and other action in connection with alleged infringements of the Clean Air Acts, the Food and Drugs Acts, the Offices, Shops and Railway Premises Act, the Factories Acts, and the Public Health Acts, and subordinate legislation; where necessary for the purpose of legal proceedings—the approval or notification of the service of statutory notices and other action taken or proposed to be taken by Chief Officers under delegated powers; the authorisation of officers to enter premises or exercise specific statutory powers; the institution of legal proceedings or other action in connection with alleged infringements of the Pharmacy and Poisons Act, 1933; the institution of legal proceedings or other action in connection with the Slaughterhouse Act, 1958.

Estimates

To consider the draft estimates of the Health Committee including all items of special works and to submit recommendations thereon to the Committee before the estimates are submitted to the Finance Committee.

Residential Homes

To deal with all matters relating to the control and management of the Dr. Garrett Memorial Home, Ashton House and Walton House with the exception of questions relating to the appointment of staff, salaries, wages and conditions of service and the purchase of bulk supplies.

STAFF

Kennedy Campbell, M.A., M.D., LL.B., D.P.H., L.M.	Medical Officer of Health and Principal School Medical Officer
Anna Elizabeth Jones, M.B., B.Ch., B.A.O., D.G.O., D.P.H., L.M.	Deputy Medical Officer of Health and Deputy Principal School Medical Officer

Management Group

N. J. Moulton, A.M Inst.T. 	Principal Administrative Officer
D. Gregory, B.A.(Admin.), A.C.I.S. ..	Chief Assistant (Finance & General)
W. V. Nelson, D.M.A. 	Chief Assistant (Personnel & Training)

Environmental and Protective Health Services

A. Butterworth, M.B., B.S., D.P.H., D.I.H. . .	Principal Medical Officer
John Francis Cawley, L.R.C.P.H.I., L.R.C.S.I. L.M., B.Ph.	Deputy Principal Medical Officer (from 1st April 1971),
W. Robinson, M.C., M.D., M.R.C.P. ..	Consultant Chest Physician
E. W. Foskett, B.Sc.(Econ.), D.P.A., M.A.P.H.I., M.R.S.H.	Chief Public Health Inspector
J. B. Aldred, M.A., M.Chem.A., F.R.I.C. . .	Public Analyst
F. P. Lawton, M.R.C.V.S., D.V.S.M., F.R.S.H.	Chief Veterinary Officer
F. R. Huxley, F.I.A.O. 	Ambulance Officer
W. E. Green 	} Senior Administrative Assistants
R. W. Peel 	

Dr. Garrett Memorial Home

Mrs. J. Knowles, S.R.N., Q.D.N. ..	Matron
---------------------------------------	--------

Ashton House (Women's Hostel)

Mrs. E. Woodhouse 	Manageress
-------------------------------------	------------

Walton House (Men's Hostel)

Mr. H. Taylor 	Manager
---------------------------------------	---------

Personal Health Services

Family Health Service

Muriel Leigh Bennett, M.B., Ch.B. ..	Principal Medical Officer
John Francis Cawley, L.R.C.P.H.I., L.R.C.S.I., L.M., B.Ph.	Deputy Principal Medical Officer, (to 31st March, 1971)
Muriel Jane Brayshay, M.B., Ch.B. ..	} Senior Medical Officers
Rosaline Howat, M.B., Ch.B. 	
Margaret Longden Marsland, M.R.C.S., L.R.C.P.	

Jean Loveday Broughton, M.R.C.S.(Eng.), L.R.C.P.(Lond.) ..	}	Departmental Medical Officers
Mairin Buckley, M.B., B.Ch., B.A.O., L.M. . .		
Elsie Margaret Dakin, M.B., Ch.B. ..		
Mahar Qamrul Hasan, M.B., B.S., D.T.M. & H., M.R.C.O.G.		
Jennifer Mary Hill, B.Sc. (1st Hons. Anatomy), M.B., Ch.B., D.Obst., M.R.C.O.G.		
Gwen Ellis Owen, M.B., Ch.B.		
Jill Roland, M.R.C.S., L.R.C.P.		
Ram Labhaya Tandan, M.B., B.S.		
Stella Yeomans, M.R.C.S., L.R.C.P.		
Mrs. M. C. Maxwell-Bradley, S.R.N., S.C.M., H.V. Certificate		Superintendent Health Visitor
Miss M. A. Thwaites, S.R.N., R.S.C.N., S.C.M., H.V. Certificate		Principal Tutor, Health Visitor Training School
Miss E. France, S.R.N., S.C.M., M.T. Diploma, H.V. Certificate		Supervisor of Midwives
Miss M. Thistlethwaite, M.B.E., S.R.N., S.C.M., Q.N., H.V. Certificate		Superintendent of Home Nursing Service
Miss J. Dunsford, S.R.N., S.C.M., Q.N., H.V. Certificate, Tutor's Certificate(R.C.N.)		Home Nurse Tutor
D. J. Tyrell, M.Ch.S., S.R.Ch.		Chief Chiropodist
R. H. Goodwin, D.M.A.		Senior Administrative Assistant

School Health Service

Margaret T. McCaffrey, M.B., B.Ch., B.A.O., D.P.H., D.C.H., L.M.		Principal Medical Officer
Sheilagh M. Davitt, B.A., M.B., B.Ch., B.A.O.		Deputy Principal Medical Officer (from 22nd November, 1971)
Shirley A. Batten, M.B., Ch.B., D.C.H. . .		Senior Medical Officer
Raymond H. L. Brown, F.R.C.S.	}	Consultant Orthopaedic Surgeons
John D. Evans, F.R.C.S.		
Peter L. Baxter, F.R.C.S.		Consultant Ophthalmologist
Maxwell J. Maxwell, F.R.C.S., D.L.O. . .		Consultant Oto-laryngologist
Norman P. Chamarette, B.Sc., M.B., B.S., D.P.M.	}	Psychiatrists
T. E. Grant, B.A.(Econ. and Social Studies), L.R.C.P., L.R.C.S., L.R.F.P.S., D.P.M.		
Thomas R. Molloy, M.D., D.P.M.		
Gordon L. Lindley, L.D.S.		Principal School Dental Officer
Maureen Attrill, L.D.S.		Deputy Principal School Dental Officer
Sheilagh M. Davitt, B.A., M.B., B.Ch., B.A.O. (to 21st November, 1971)	}	Senior Medical Officers
Pearl P. Mycock, M.B., Ch.B., D.R.C.O.G.		
Elizabeth Stokes, F.R.C.S.I., L.R.C.P.I., L.M.		

Fionnuala M. Branscombe, M.B., B.Ch., B.A.O.	}	Departmental Medical Officers
Vincent J. Haslem, L.R.C.P.I. and S.I.L.M. (from 29th November, 1971)		
Joyce Somekh, M.B., Ch.B., L.D.S. ..		
Maureen N. Barker, B.D.S. ..	}	Senior Dental Officers
Thomas I. Curry, L.D.S. . .		
Henry Hodson, L.D.S. ..		
Teresa A. Gilbride, L.D.S., R.C.S. ..		
J. Spencer Butterworth, B.D.S. ..	}	Dental Officers
Pamela A. Dixon, B.D.S. ..		
Irena M. Filipiec, L.D.S., R.C.S. ..		
Norman B. Glickman, L.D.S. ..		
James A. Robinson, L.D.S. ..		
Anne G. Sylvester, L.D.S. ..		
Tom Dinsdale, M.B., Ch.B., F.F.A., R.C.S.	}	Consultant Anaesthetists
Edward G. Rees-Jones, M.B., Ch.B., D.A.		
Kenneth Heap, M.B., Ch.B., D.A. (from November, 1971)		
Hans Eirew, B.D.S.	}	Consultant Orthodontists
Alan A. Rhodes, L.D.S., D.D.O. ..		
S. Iyer, L.D.S., D.D.O., R.F.P.S., F.D.S., R.C.S.		
Brenda Kellett, L.C., S.T.		Senior Speech Therapist
Arthur A. Allen, S.R.P.	}	Superintendent Physiotherapists
Mary Downer, M.C.S.P.		
Marjorie Hendley, M.C.S.P.		
Peggy S. Foxcroft, B.A.		Head Social Worker
Norman Leigh		Senior Administrative Assistant (Retired 5th March, 1971)
Olga Ravenscroft		Acting Senior Administrative Assistant (from 8th March, 1971)

Publications by members of the Health Department staff

Lawton, F. P. (Chief Veterinary Officer)	Paper:—"Methods of Handling and Slaughtering Animals in Municipal Abattoirs". Presented at a Symposium of the Universities Federation of Animal Welfare, January, 1971.
Newton, S. N. (Senior Food Inspector)	Article:—"Outbreak of food poisoning due to Salmonella infantis in association with Salmonella typhimurium phage type U121" Medical Officer, 12th March, 1971.
Coupe, W. (Public Health Inspector)	Article:—"Common-sense basis the best approach". Accident prevention and the Offices, Shops and Railway Premises Act. Municipal Engineering, 8th January, 1971.

Number of staff employed in the Health Department in December, 1971

Types of staff	Numbers employed		
	Full-time	Part-time	Total
Administrative medical officers	8	—	8
Clinical medical officers	16	53	69
Analytical chemists and laboratory assistants ..	11	—	11
Veterinary officers	3	—	3
Nursing :—			
Health visitors, school/clinic nurses	175	38	213
Home nursing (incl. 8 students, 6 P.B.N.) ..	106	32	138
Midwifery	57	15	72
Residential homes	5	1	6
Physiotherapists	14	4	18
Chiropodists	11	22	33
Speech therapists	9	10	19
Social workers	7	3	10
Community relations officer	1	—	1
Dental officers	12	16	28
Dental auxiliaries	4	—	4
Dental technicians	4	—	4
Dental surgery assistants	25	3	28
Orthodontists	—	3	3
Anaesthetists	—	5	5
Public health inspectors	85	—	85
Student public health inspectors	17	—	17
Technical assistants (clean air, housing and shops)	28	—	28
Trainee technical assistants	3	—	3
Authorised meat inspectors	13	—	13
Administrative and general	184	43	227
Ambulance operational control and supervisors ..	22	—	22
Storekeepers and assistants	5	—	5
Supervisors—public conveniences	2	—	2
Operational manual workers, etc.			
Ambulance, transport and disinfection	175	1	176
Staff in residential homes	54	16	70
Staff in municipal hostels	48	—	48
Public convenience service	71	24	95
Family health centre cleaners	23	27	50
Rodent operators	12	—	12
Bath attendants	20	3	23
Clinic attendants	8	5	13
Others	11	3	14
Totals	1,249	327	1,576

Organisation of the department

The Health Department's main objective might be briefly expressed as the provision of services necessary to safeguard adequately the health of the citizens of Manchester and promote the improvement where possible, of their physical, mental and social well-being. To achieve this objective the services of the Health Department are orientated in three main directions, the protection against existing hazards, prevention of potential hazards and the provision of health education.

During recent years many services have developed and new services have been introduced. Additionally, in 1970 responsibility for the medical and dental work of the School Health Service was transferred to the Health Department while in 1971, as a result of the Social Services Act, certain Health Department services were transferred to the new Social Services Department.

Thus the emphasis has been on change, and in line with modern business practice, it was decided that the organisational structure of the department should be reviewed, reorganised as necessary, and revised gradings for administrative and clerical personnel introduced where merited after a full-scale job evaluation exercise. The ensuing proposals were approved by the City Council and in August a new organisational structure was introduced in the Health Department.

The former structure had consisted solely of operational divisions. Under the new structure a re-grouping of services was accompanied by the establishment of a Departmental Management and Administration Group to strengthen the departmental management arrangements. The operational groups are now divided into two main divisions known as the Environmental and Protective Health Services Division and the Personal Health Services Division. The Environmental and Protective Health Services Division is sub-divided into sections under the control respectively of the Principal Medical Officer (Environmental Health), the Chief Public Health Inspector, the Chief Veterinary Officer and the Public Analyst. The Personal Health Services Division is sub-divided into the Family Health Services Group which is controlled by the Principal Medical Officer (Family Health), and the School Health Services Group where the Principal Medical Officer (School Health) controls the medical work and the Principal Dental Officer controls the dental service.

The new structure provides a departmental organisation which meets the requirements of modern organisational practice by combining an adequate measure of central co-ordination and control with decentralisation of responsibility for day-to-day operation of services, while the number of levels of authority have been reduced to the minimum consistent with optimum efficiency. The changes should facilitate more effective management and better use of resources with consequential improvement in services to the public.

Preparation for NHS and local government reorganisation will inevitably add to the pressure on the Health Department's administrators. The new administrative arrangements should enable them to meet the challenge more effectively than might otherwise have been possible.

Departmental Management and Administration Group

As part of the reorganisation of the Health Department approved by the City Council, a Departmental Management and Administration Group was established in August.

The former organisational structure had provided solely for operational divisions under the overall control of the Medical Officer of Health and his Deputy. However, under changing conditions, co-ordination, planning and general management of the department's activities had become increasingly difficult in the absence of a central administration unit to assist the Medical Officer of Health in his departmental management responsibilities.

The new group was established without any increase in the department's total staff assignment, the officers being drawn from the administrative, clerical and typing personnel of the operational divisions after a general re-appraisal of duties, reorganisation where necessary, and job evaluation.

The group is headed by the Principal Administrative Officer who is assisted by the Chief Assistant (Finance and General) and the Chief Assistant (Personnel and Training). These officers are concerned generally with the co-ordination of management and administration within the Health Department and with the observance of the City Council's regulations and they have particular responsibilities relating to the co-ordination of financial matters, committee work, communications within the department, liaison with other departments of the Corporation and other authorities and organisations, the progress of capital projects, forward planning and the development of services.

Departmental control and co-ordination in the personnel function including staff training, manpower planning and management development, is also undertaken within the group, along with certain duties in connection with the preparation of salaries and wages and the maintenance of staff records for the department's personnel.

The first few months' experience have already shown benefits arising from the new arrangements, with a smoother flow of work, better co-ordination, and deeper examination and speedier handling of administrative matters affecting more than one section of the department.

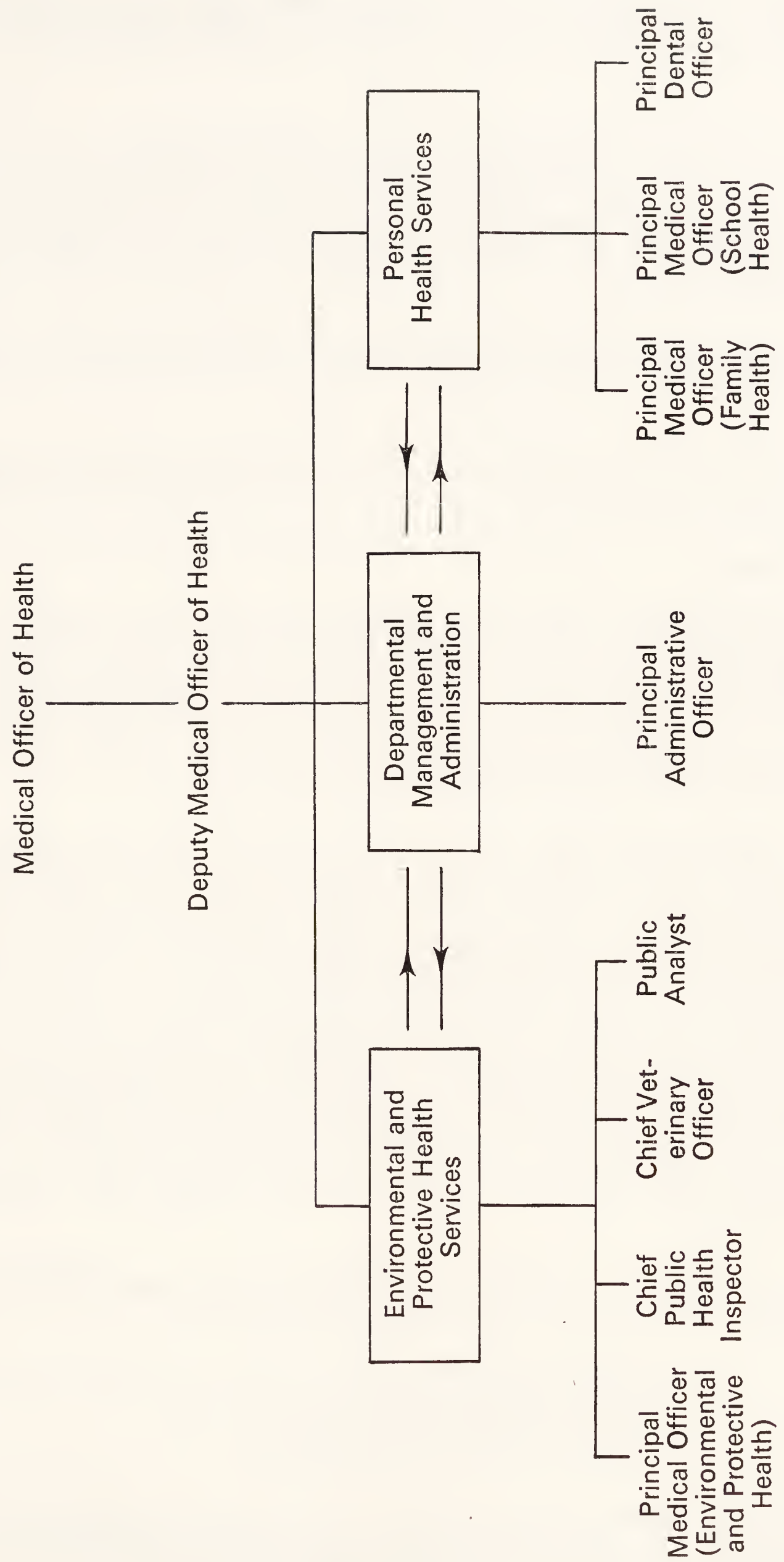
Personnel work

The review of the grading structure of the administrative and clerical staff started in 1970 was completed in 1971, and proposals for the reorganisation of the department were approved by the Health Committee and agreed by the City Council (Details of this are set out in another part of the Annual Report).

Considerable work was done in connection with the formulation of a productivity scheme for the ambulance service.

Following detailed investigations by the Town Clerk's Management Services Section, a scheme covering the ambulancemen was negotiated with the men through their Union, and approved by the Establishment Committee in December, 1971. The scheme, which covers 167 employees,

Organizational Structure of the Health Department



provides for bonus earnings of approximately £6 per week to all employees, and nett savings to the Corporation of £27,000. This is the first scheme in the country for ambulancemen which provides for a productivity bonus based on measured standard performances.

Following the transfer of the school health services to the Health Department in 1970, a review of the administrative and clerical staff was carried out. As a result, certain changes were proposed in the staffing structure and gradings which reflected the required re-allocation of duties and responsibilities within the Health Department necessary to achieve the desired integration.

Preliminary investigations were begun in the chiropody service to determine the extent of expansion needed.

Work was also carried out during the latter part of the year to implement the many changes brought about by the introduction of the new departmental management structure.

Training

An induction course was organised by the Staff Officer, within the department, for newly appointed junior clerical officers. This course was organised on somewhat different lines from those held in previous years. In addition to talks and discussions on the work of the various sections of the department, the junior officers were taken on visits to various establishments connected with the department including the Brunswick Health Centre and the City's abattoir and meat market.

Senior nursing staff, public health inspectors, administrative, clerical and manual staff attended courses arranged by the Town Clerk. Four senior nurses and two senior public health inspectors attended a one-week residential course for senior or middle management. Two senior nurses attended a one-week residential course for first line management, and a foreman in the public conveniences service attended a one-week residential course for supervisors of manual workers. Three senior nurses, four senior public health inspectors and one administrative officer attended a one-week "Introduction to Management" course. One of the administrative trainees in the department attended a course on the "Function of Training" with specific reference to the analysis of training needs. One senior nurse attended a course concerned with "Recruitment and Selection of Staff". Three officers nearing retirement age attended a special course for "Preparation for Retirement".

In addition to the above courses, members of the staff attended the following one-day seminars organised by the Town Clerk:—

- Orientation to Local Government.
- Project Co-ordination.
- Utilisation of plant and equipment, and
- Planned Preventive Maintenance.

Practical training was arranged for one week for a number of students attending the Medical Secretaries' Course at Salford Technical College and Fielden Park College of Further Education, Manchester.

PROTECTIVE HEALTH SERVICES

Introduction

The outstanding event of the year was the occurrence of eight cases of diphtheria in February and the subsequent search for contacts which revealed a number of carriers of both virulent and non-virulent organisms. A large scale immunization campaign was mounted and continued to the year's end. During this outbreak all sections of the health department were involved at some time and the enthusiasm and unstinted efforts of all grades of staff was indeed quite remarkable and reassuring. The close liaison quickly established and maintained between the Health Department, the Public Health Laboratory Service, the Hospitals, the General Practitioners and the Head Teachers did much to smooth out the many problems that were a daily event for several weeks.

Following the re-organisation of the Health Department all responsibilities for the immunization of school children was transferred from the School Health Service to the Environmental and Protective Health Service.

In June, a Deputy Principal Medical Officer became fully responsible for the operation, re-organisation and where possible for the expansion of the occupational health service.

General Statistics

Population:—

Registrar General's estimated population mid-year, 1971

		Males	260,909		
		Females	281,521	..	.. 542,430
Census population, 1971	..	Males	263,042		
(advance analysis provisional)		Females	278,713	..	.. 541,755

Deaths:—

Number of deaths	..	..	Males	3,670	..	
			Females	3,462	..	.. 7,132
Death rate per 1,000 of population			Males	14.07		
			Females	12.30	..	.. 13.15
Comparability factor	..	..	..	..	..	.. 1.09
Death rate as adjusted by factor	..	..	..	..	..	.. 14.33
Percentage of mortality occurring in institutions	..	..	..	..	..	.. 58.83

Births:—

		Males	Females	Total			
Live births	Legitimate	3,765	3,463	7,228			
	Illegitimate	870	832	1,702	..	..	8,930
Live birth rate per 1,000 of population				..	..	..	16.46
Comparability factor	..	..	..	..	..	..	1.05
Birth rate as adjusted by factor			..	..	..	..	17.28
Illegitimate live births per cent. of total live births					..	..	19.06
		Males	Females	Total			
Stillbirths	Legitimate	52	55	107			
	Illegitimate	16	15	31	..	..	138
Total live and stillbirths..	..	..	..	..	..	..	9,068
Stillbirth rate per 1,000 total births (live and still)					..	..	15.22

Infant mortality:—

Deaths of all infants under one year	..	..	..	..	210
Rate per 1,000 total live births	..	..	..	..	23.52
Deaths of legitimate infants under one year	..	..	..	..	168
Rate per 1,000 legitimate live births	..	..	..	..	23.24
Deaths of illegitimate infants under one year	..	..	..	..	42
Rate per 1,000 illegitimate live births	..	..	..	..	24.68

Neonatal mortality:—

Deaths of infants under four weeks	..	..	..	..	134
Rate per 1,000 total live births	..	..	..	..	15.01

Early neonatal mortality:—

Deaths of infants under one week	..	..	..	..	124
Rate per 1,000 total live births	..	..	..	..	13.89

Post-neonatal mortality:—

Deaths of infants over four weeks and under one year	..	..	..	..	76
Rate per 1,000 total live births	..	..	..	..	8.51

Perinatal mortality :—

Stillbirths and deaths of infants under one week	262
Rate per 1,000 total births (live and still)	28·89

Maternal mortality:—

	Deaths	Rate per 1,000 of total births	
Abortion	Nil	—	—
Other maternal causes	Nil	—	—

Excess of births over deaths	1,798
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General

Area of the City in Acres	27,255
Number of persons per acre	19·90
Number of occupied structurally separate dwellings (Census 1961)	205,006
Persons per occupied structurally separate dwelling (Census 1961)	3·23
Number of houses according to Rate Book (1st April, 1971) ..	179,973
Persons per house	3·01
Rateable value (1st April, 1971)	£29,524,685
Sum represented by a penny rate (estimated)	£276,000
Number of new houses erected during 1971 :—	
By local authority	4,021
By other agencies or persons	846
	4,867

Meteorology

The following summary of the weather in Manchester during the year 1971 has been provided by the meteorological officer in charge of the Manchester Weather Centre:—

	TEMPERATURE						RAINFALL				
	Mean	Diff. from Av. (1931- 60)	Warmest Day		Coldest Night		Total	Diff. from Av. (1931- 60)	Wettest Day		Wet Days (.04")
			Date	Max.	Date	Min.			Date	Amt.	
	°C.	°C.		°C.		°C.	ins.	ins.		ins.	
Jan.	5.9	+1.8	10th	14.6	4th	-4.9	2.70	-0.62	28th	0.53	13
Feb.	5.8	+1.5	20th	11.2	16th	-1.6	2.08	-0.37	12th	0.51	9
Mar.	6.1	-0.4	30th	13.1	5th	-1.7	1.56	-0.34	1st	0.44	6
Apr.	9.1	+0.2	22nd	18.5	28th	1.6	1.96	+0.01	23rd	0.78	6
May	12.7	+0.7	11th	21.1	2nd	3.7	2.18	-0.32	6th	0.56	12
June	12.7	-2.3	1st	21.4	15th	5.3	2.57	+0.18	18th	0.65	15
July	17.9	+1.4	8th	28.1	21st	8.7	1.67	-1.48	30th	0.79	7
Aug.	16.1	-0.2	20th	23.6	16th	8.5	4.23	+0.77	10th	0.71	12
Sept.	15.7	+1.6	8th	25.1	28th	8.0	1.13	-1.75	26th	0.71	6
Oct.	12.5	+2.0	2nd	22.5	14th	3.4	3.78	+0.34	18th	2.49	10
Nov.	6.9	-0.2	4th	18.3	29th	-1.4	3.37	+0.04	20th	0.98	13
Dec.	7.7	+2.6	20th	14.7	3rd	-1.0	0.80	-2.22	22nd	0.27	4
Year	10.8	+0.7	8/7	28.1	4/1	-4.9	28.03	-5.76	18/10	2.49	113

	SUNSHINE				EXTREME WINDS						
	Total	Diff. from Av. (1931- 60)	Sunniest Day		Highest Hourly Wind				Highest Gust		
			Date	Amt.	Dir.	Speed	Hour ended at		Speed	Day and Time	
	hrs.	hrs.		hrs.	degs.	kts.	Day	hr.	kts.	Day	Time
Jan.	31	0	20th	6.0	220	23	24th	1100	44	18th	1955
Feb.	41	-8	21st	6.2	240	23	13th	1300	48	12th	2225
Mar.	61	-32	22nd	9.2	260	21	25th	1500	39	25th	1540
April	98	-30	28th	12.6	310	20	16th	1700	41	16th	1625
May	211	+37	14th	13.7	070	18	13th	1000	35	6th	1705
June	130	-45	4th	14.0	040	21	3rd	2400	37	3rd	2355
July	222	+69	18th	14.0	300	20	15th	2000	37	31st	0420
Aug.	122	-19	25th	12.9	230	28	28th	1200	47	28th	1130
Sept.	147	+38	6th	11.4	260	26	1st	1200	46	1st	1110
Oct.	125	+45	6th	9.6	230	26	22nd	0400	45	22nd	0250
Nov.	69	+28	9th	7.6	250	24	21st	0600	46	21st	1435
Dec.	24	-4	14th	4.1	050	23	31st	2200	42	31st	2050
Year	1281	+79	4/6 18/7	14.0	230	28	28/8	1200	48	12/2	2225

Causes of Death by Age
Registrar General's Return—Manchester

Causes of Death	Sex	All ages	Under four weeks	Four weeks and under 1 year	Age in Years								
					1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75 and over
Enteritis and other diarrhoeal diseases	M F	4 —	2 —	1 —	— —	— —	— —	1 —	— —	— —	— —	— —	— —
Tuberculosis of respiratory system	M F	24 6	— —	— —	— —	— —	— —	— —	3 —	2 —	4 1	10 2	5 3
Late effects of respiratory T.B. ...	M F	— 1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— 1
Other tuberculosis	M F	4 —	— —	— —	— —	— —	— —	2 —	1 —	1 —	— —	— —	— —
Whooping cough	M F	1 —	— —	1 —	— —	— —	— —	— —	— —	— —	— —	— —	— —
Meningococcal infection	M F	1 —	— —	1 —	— —	— —	— —	— —	— —	— —	— —	— —	— —
Syphilis and its sequelae	M F	3 —	— —	— —	— —	— —	— —	— —	— —	1 —	1 —	1 —	— —
Other infective and parasitic diseases	M F	12 13	2 —	— 1	— 1	1 —	1 2	1 1	1 1	2 —	3 1	— 2	1 4
Malignant neoplasm, buccal cavity, etc.	M F	24 8	— —	— —	— —	— —	— —	1 —	— —	— 3	7 2	11 2	5 1
Malignant neoplasm, oesophagus	M F	21 22	— —	— —	— —	— —	— —	— 1	1 —	2 1	6 4	7 8	5 8
Malignant neoplasm, stomach	M F	71 63	— —	— —	— —	— —	— —	— 1	2 —	5 6	26 11	23 16	15 29
Malignant neoplasm, intestine ...	M F	92 124	— —	— —	— —	— —	— —	— —	1 6	8 12	24 23	31 43	28 40
Malignant neoplasm, larynx ...	M F	10 1	— —	— —	— —	— —	— —	— —	— —	— —	4 1	5 —	1 —
Malignant neoplasm, lung, bronchus	M F	421 85	— —	— —	— —	— —	— —	1 2	11 3	39 14	150 25	160 26	60 15
Malignant neoplasm, breast ...	M F	1 126	— —	— —	— —	— —	— —	— 4	— 10	— 15	— 27	— 39	1 31
Malignant neoplasm, uterus ...	F	50	—	—	—	—	—	—	3	13	12	12	10
Malignant neoplasm, prostate	M	39	—	—	—	—	—	—	—	—	2	13	24
Leukaemia	M F	17 6	— —	— —	— —	3 1	— —	— —	2 —	1 —	4 2	5 —	2 3
Other malignant neoplasms ...	M F	166 193	— —	— —	1 —	1 5	2 3	3 1	6 8	16 17	42 42	57 57	38 60
Benign and unspecified neoplasms	M F	9 7	— —	— —	— —	1 1	— —	— —	— —	1 2	2 1	2 2	3 1
Diabetes mellitus	M F	21 43	— —	— —	— —	— —	— —	— —	— 2	4 4	5 2	8 16	4 19
Avitaminoses, etc.	M F	— 1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— 1	— —
Other endocrine, etc. diseases ...	M F	1 10	— —	— —	— —	— —	— 1	— 1	— 1	— —	1 —	— 4	— 3
Anaemias	M F	4 9	— —	— —	— —	— —	— —	— —	— —	— —	— 2	2 3	2 4
Mental disorders	M F	8 8	— —	— —	— —	— —	— —	— —	— —	— —	1 1	2 2	5 5
MenIngitis	M F	— 3	— 1	— 2	— —	— —	— —	— —	— —	— —	— —	— —	— —
Multiple sclerosis	M F	3 8	— —	— —	— —	— —	— —	— —	1 1	1 —	1 2	— 4	— 1
Other diseases of nervous system, etc. ...	M F	24 37	— —	1 1	1 1	2 1	— 1	— —	2 1	2 4	3 5	6 10	7 13
Chronic rheumatic heart disease ...	M F	33 55	— —	— —	— —	1 —	1 —	1 —	1 1	8 5	11 17	6 16	4 16
Hypertensive disease ...	M F	40 33	— —	— —	— —	— —	— —	— —	1 —	6 5	9 4	13 4	11 20

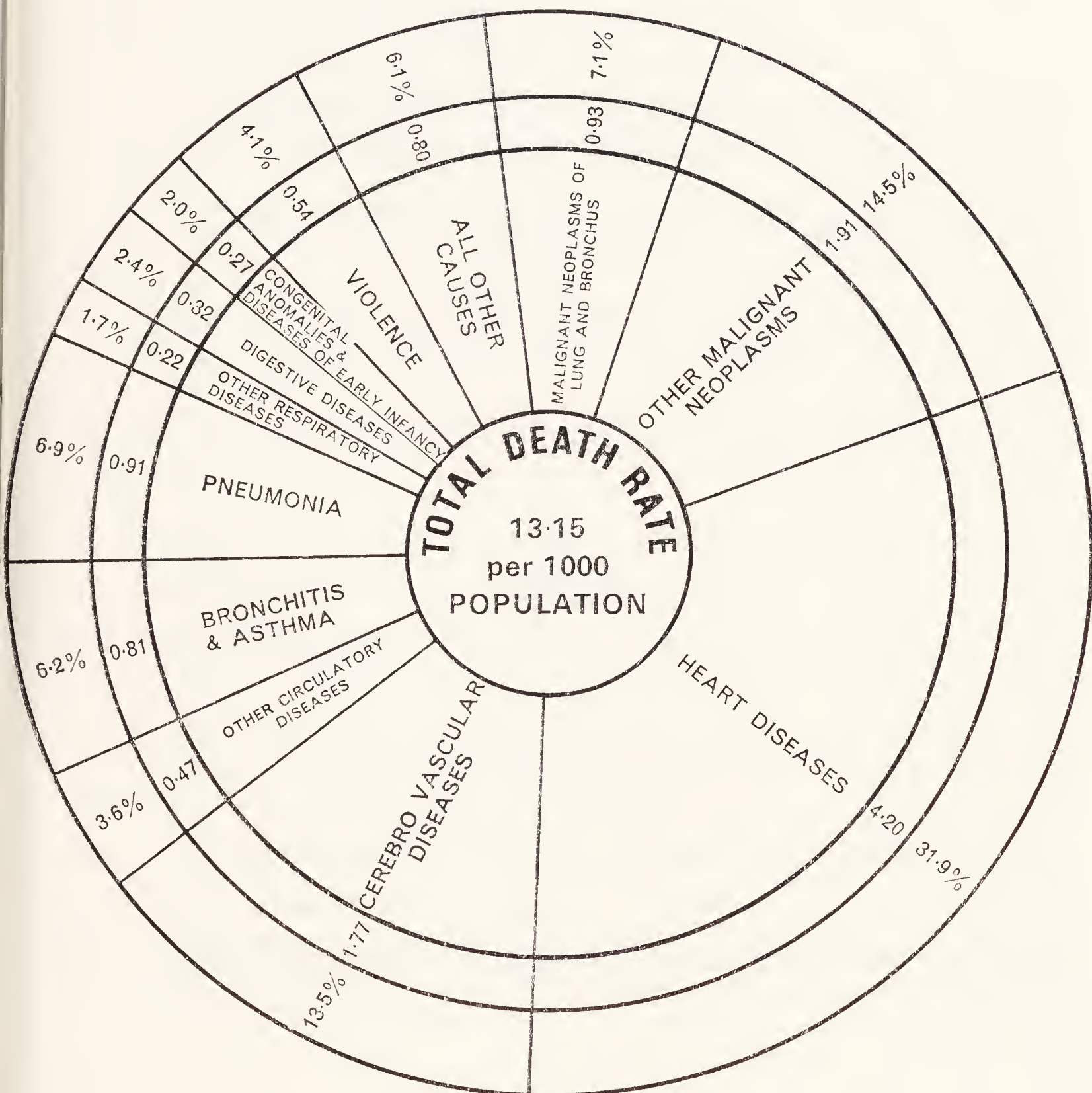
Causes of Death by Age

Registrar General's Return—Manchester—continued

Causes of Death	Sex	All ages	Under four weeks	Four weeks and under 1 year	Age In Years								
					1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75 and over
Ischaemic heart disease	M	994	—	—	—	—	—	1	21	107	269	328	268
	F	770	—	—	—	—	—	—	6	18	89	235	422
Other forms of heart disease ...	M	131	—	—	—	—	—	1	4	7	23	36	60
	F	223	1	1	—	—	—	—	—	2	22	36	161
Cerebrovascular disease	M	375	—	—	—	—	—	2	2	26	58	127	160
	F	587	—	—	—	1	2	1	3	27	49	123	381
Other disease of circulatory system	M	113	—	—	—	—	—	1	—	4	17	45	46
	F	141	—	—	—	—	—	1	2	3	8	35	92
Influenza	M	9	—	1	—	—	—	—	—	—	1	4	3
	F	4	—	—	—	—	—	—	—	—	1	1	2
Pneumonia	M	206	4	10	2	1	—	—	1	6	26	46	110
	F	288	2	13	—	—	—	—	3	6	14	54	196
Bronchitis and Emphysema ...	M	299	—	1	—	—	1	1	2	16	59	120	99
	F	127	—	—	—	—	—	1	3	7	27	28	61
Asthma	M	5	—	—	—	—	—	—	1	1	1	2	—
	F	8	—	—	—	1	1	—	1	3	1	1	—
Other diseases of respiratory system	M	65	1	7	3	—	2	2	1	6	14	15	14
	F	43	1	9	—	—	1	2	—	—	5	14	11
Peptic ulcer	M	34	—	—	—	—	—	1	2	3	8	8	12
	F	19	—	—	—	—	—	—	—	1	5	3	10
Appendicitis	M	5	—	—	—	—	—	—	1	1	—	3	—
	F	1	—	—	—	—	—	—	—	—	—	1	—
Intestinal obstruction and hernia	M	13	1	—	—	—	—	—	—	1	4	1	6
	F	12	1	—	—	—	—	—	—	—	2	2	7
Cirrhosis of liver	M	11	—	—	—	—	—	—	—	4	3	3	1
	F	11	—	—	—	—	—	—	—	3	2	2	4
Other diseases of digestive system	M	29	—	—	—	—	—	—	3	4	7	5	10
	F	39	1	1	—	—	1	—	—	3	9	9	15
Nephritis and nephrosis	M	25	—	—	—	—	—	4	3	2	9	5	2
	F	10	—	—	—	—	1	—	2	—	2	3	2
Hyperplasia or prostate	M	13	—	—	—	—	—	—	—	—	2	6	5
Other diseases, genito-urinary system	M	19	—	1	—	—	1	—	—	1	5	6	5
	F	29	—	—	—	—	—	3	—	2	3	3	18
Diseases of skin, subcutaneous tissue	M	—	—	—	—	—	—	—	—	—	—	—	—
	F	4	—	—	—	—	—	—	—	—	—	—	4
Diseases of musculo-skeletal system	M	6	—	—	1	—	—	—	—	—	—	4	1
	F	20	—	—	—	—	—	—	1	3	3	5	8
Congenital anomalies	M	28	15	9	1	1	1	—	—	1	—	—	—
	F	22	8	6	3	—	—	—	1	1	3	—	—
Birth Injury, difficult labour, etc. ...	M	32	31	1	—	—	—	—	—	—	—	—	—
	F	19	19	—	—	—	—	—	—	—	—	—	—
Other causes of perinatal mortality	M	27	27	—	—	—	—	—	—	—	—	—	—
	F	16	16	—	—	—	—	—	—	—	—	—	—
Symptoms and ill defined conditions	M	16	—	5	—	1	—	—	—	—	1	—	9
	F	28	—	1	—	—	—	1	—	—	—	2	24
Motor vehicle accidents ...	M	51	—	—	4	3	14	6	2	7	6	5	4
	F	25	—	—	—	1	—	1	1	3	5	5	9
All other accidents	M	67	1	1	5	8	7	12	6	1	8	7	11
	F	79	—	1	3	2	3	3	3	4	8	9	43
Suicide and self-inflicted injuries	M	30	—	—	—	—	3	3	3	7	8	6	—
	F	16	—	—	—	—	1	1	1	1	5	5	2
All other external causes ...	M	13	—	—	—	—	2	1	2	2	2	3	1
	F	9	—	—	—	—	3	—	2	2	—	1	1
Total all causes	M	3,670	84	40	18	23	35	45	87	306	837	1,147	1,048
	F	3,462	50	36	8	13	20	25	66	190	448	846	1,760
Grand total	All	7,132	134	76	26	36	55	70	153	496	1,285	1,993	2,808

DEATHS FROM PRINCIPAL CAUSES

RATE per 1000 POPULATION
AND
PERCENTAGE of TOTAL DEATHS



Deaths in age groups and percentages of total deaths

Year	Total number of deaths	Age groups and percentages									
		0—		1—4		5—44		45—64		65—	
		No.	%	No.	%	No.	%	No.	%	No.	%
1901 ..	11,801	3,114	26·39	1,676	14·20	2,725	23·09	2,627	22·26	1,659	14·06
1911 ..	12,272	2,901	23·64	1,516	12·35	2,711	22·09	2,790	22·74	2,354	19·18
1921 ..	10,093	1,707	16·91	728	7·21	2,313	22·92	2,687	26·62	2,658	26·34
1931 ..	10,618	1,027	9·67	503	4·74	1,943	18·30	3,144	29·61	4,001	37·68
1941 ..	10,016	832	8·31	265	2·65	1,467	14·65	2,886	28·81	4,566	45·58
1951 ..	9,676	439	4·54	64	0·66	748	7·73	2,568	26·54	5,857	60·53
1961 ..	8,910	388	4·35	36	0·40	457	5·13	2,369	26·59	5,660	63·53
1962 ..	8,767	413	4·71	47	0·54	424	4·84	2,336	26·64	5,547	63·27
1963 ..	8,504	391	4·60	62	0·73	449	5·28	2,338	27·49	5,264	61·90
1964 ..	7,715	382	4·95	38	0·49	421	5·46	2,082	26·99	4,792	62·11
1965 ..	7,866	337	4·29	43	0·55	421	5·35	2,172	27·61	4,893	62·20
1966 ..	7,844	306	3·90	50	0·64	358	4·56	2,071	26·40	5,059	64·50
1967 ..	7,751	258	3·33	50	0·65	381	4·92	1,994	25·72	5,068	65·38
1968 ..	7,646	283	3·70	46	0·60	337	4·40	1,932	25·27	5,048	66·03
1969 ..	7,543	290	3·84	51	0·68	332	4·40	1,930	25·59	4,940	65·49
1970 ..	7,417	219	2·95	43	0·58	349	4·71	1,904	25·67	4,902	66·09
1971 ..	7,132	210	2·94	26	0·37	314	4·40	1,781	24·97	4,801	67·32

Ward population, area, density, births and deaths
(Figures compiled in the department)

Wards	Estimated population	Area in acres	Persons per acre	Live births			Deaths		Deaths under one year of age			Infant mortality per 1,000 live births	
				Legitimate	Illegitimate	Totals	Rate per 1,000 population	Totals	Rate per 1,000 population	Legitimate	Illegitimate		Totals
City of Manchester ..	542,430	27,255	19.90	7,228	1,702	8,930	16.46	7,132	13.15	168	42	210	23.52
Alexandra Park ..	18,674	780	23.94	261	64	325	17.40	253	13.55	6	2	8	24.61
All Saints ..	6,936	315	22.02	97	43	140	20.18	104	14.99	1	—	1	7.14
Ardwick ..	5,495	436	12.60	93	32	125	22.75	77	14.01	5	2	7	56.00
Baguley ..	26,287	1,405	18.71	225	44	269	10.23	216	8.22	3	3	6	22.30
Barlow Moor ..	14,046	1,120	12.54	113	38	151	10.75	227	16.16	2	2	4	26.49
Benchill ..	24,307	1,027	23.67	233	62	295	12.14	275	11.31	6	1	7	23.73
Beswick ..	7,020	243	28.89	155	33	188	26.78	132	18.80	9	2	11	58.51
Blackley ..	20,388	1,226	16.63	256	40	296	14.52	274	13.44	5	—	5	16.89
Bradford ..	14,030	772	18.17	192	36	228	16.25	180	12.83	2	—	2	8.77
Burnage ..	17,766	737	24.11	152	40	192	10.81	269	15.14	3	—	3	15.62
Cheetham ..	12,010	446	26.93	247	65	312	25.98	127	10.57	4	—	4	12.82
Chorlton-cum-Hardy ..	17,617	849	20.75	254	40	294	16.69	212	12.03	3	—	3	10.20
Collegiate Church ..	4,658	501	9.30	80	19	99	21.25	82	17.60	—	—	—	—
Crumpsall ..	24,383	1,805	13.51	287	40	327	13.41	325	13.33	6	2	8	24.46
Didsbury ..	15,837	1,181	13.41	180	18	198	12.50	238	15.03	1	—	1	5.05
Gorton North ..	18,286	540	33.86	327	53	380	20.78	238	13.01	7	—	7	18.42
Gorton South ..	14,142	631	22.41	175	27	202	14.28	208	14.71	3	—	3	14.85
Harpurhey ..	8,641	372	23.23	208	46	254	29.05	128	14.81	12	1	13	51.18
Hugh Oldham ..	7,561	498	15.18	113	44	157	20.76	149	19.71	5	1	6	38.22
Levenshulme ..	15,192	606	25.07	257	38	295	19.42	198	13.03	4	—	4	13.56
Lightbourne ..	15,624	390	40.06	247	30	277	17.73	238	15.23	4	—	4	14.44
Longsight ..	13,906	355	39.17	301	89	390	28.04	158	11.36	6	—	6	15.38
Miles Platting ..	10,184	444	22.94	141	29	170	16.69	137	13.45	3	1	4	23.53
Moss Side East ..	12,618	277	45.55	213	79	292	23.14	128	10.14	11	5	16	54.79
Moss Side West ..	14,544	268	54.27	298	141	439	30.18	164	11.28	8	2	10	22.77
Moston ..	18,432	1,170	15.75	186	23	209	11.34	334	18.12	3	1	4	19.14
New Cross ..	8,795	354	24.84	92	42	134	15.24	159	18.08	2	1	3	22.39
Newton Heath ..	15,135	905	16.72	199	32	231	15.26	209	13.81	6	1	7	30.30
Northenden ..	22,369	1,763	12.69	209	40	249	11.13	305	13.63	6	—	6	24.10
Old Moat ..	13,145	624	21.06	140	31	171	13.01	161	12.25	4	—	4	23.39
Openshaw ..	15,528	543	28.60	206	49	255	16.42	177	11.40	3	—	3	11.76
Rusholme ..	14,676	726	20.21	244	45	289	19.69	191	13.01	5	2	7	24.22
St. George's ..	4,370	318	13.74	63	40	103	23.57	106	24.26	2	2	4	38.83
St. Luke's ..	7,013	287	24.44	121	34	155	22.10	85	12.12	5	3	8	51.61
St. Mark's ..	15,009	517	29.03	203	44	247	16.46	214	14.26	3	1	4	16.19
St. Peter's ..	2,234	837	2.67	33	12	45	20.14	69	30.89	1	1	2	44.44
Withington ..	13,831	560	24.70	151	42	193	13.95	176	12.72	2	3	5	25.91
Woodhouse Park ..	31,741	1,427	22.24	276	78	354	11.15	209	6.58	7	3	10	28.25

Infectious Disease and Epidemiology

Incidence of infectious disease (excluding tuberculosis, which is to be found on page 212) in the City, compared with the previous year and the average of the ten years, is shown in the following table:—

Disease	1971	1970	10 year Average 1961–1970
Anthrax	—	—	—
Cholera	—	—	—
Diphtheria	8	—	—
Dysentery	265	269	438
Encephalitis (acute)	3	4	2
Food poisoning	144	202	170
Infective jaundice (notifiable from 1st February, 1966)	204	333	234
Leprosy	—	—	—
Leptospirosis (notifiable from 1st October, 1968)	—	—	—
Malaria	—	—	—
Measles	1,253	2,905	3,948
Meningitis (acute)	173	49	17
Ophthalmia neonatorum	25	24	28
Paratyphoid	1	9	6
Pemphigus neonatorum	—	—	—
Plague	—	—	—
Poliomyelitis (acute)	—	—	—
Relapsing fever	—	—	—
Rubella	1,522	551	1,532
Scarlet fever	140	209	244
Smallpox	—	—	—
Tetanus (notifiable from 1st October, 1968) ..	—	1	—
Typhoid	3	2	4
Typhus	—	—	—
Whooping cough	255	485	507
Yellow fever (notifiable from 1st October, 1968)	—	—	—

Anthrax

The last case occurred in Manchester in 1967.

Diphtheria

8 cases with 1 death.

All the eight cases of diphtheria were associated with the outbreak which occurred in February.

The early cases

On Thursday, 4th February, 1971, a 9 year old child attended the Manchester Ear Hospital and was subsequently transferred to Monsall Infectious Diseases Hospital as a suspected case of diphtheria. It was perhaps fortunate that the physician who examined the child at the ear hospital had previously had experience of clinical diphtheria in the Middle East. By Monday morning, 8th February, there appeared to be little doubt of the accuracy of the diagnosis (Case 1).

Consequently, Health Department staff began the task of contact-tracing. This child resided with his parents and four siblings in a block of pre-1939 Corporation-owned flats in the Longsight area of Manchester; 200 other families also lived on these premises. The Longsight area has a population of approximately 31,000 persons with a housing density of 30 per acre, the majority of dwellings being between 70 and 120 years old. While there are a few substantial properties, at least 50 per cent of dwellings are in various stages of procedure under the Housing Acts, with a view to clearance action. The Corporation-owned flats in question form part of a pre-war Corporation housing estate, with flats rising to four storeys—without lifts.

It was agreed at the start that all children in a family with a confirmed case of diphtheria would be hospitalised. The 10-year old brother of Case 1 was subsequently confirmed to have diphtheria (Case 2).

A 5-year old child, also living in these flats, was transferred to Monsall Hospital on 12th February and also confirmed to be a case of diphtheria (Case 3). By this time the general practitioners and hospital doctors had been alerted to the danger, and on 18th February a child aged 5 years, living less than half a mile away from these three cases, was admitted to Pendlebury Hospital with myocarditis. Confirmation of diphtheria was made the next day (Case 4).

Cases 1, 3 and 4 had never been immunised, while Case 2 had received a primary immunisation course (but no subsequent booster) nine years previously. The four cases had attended the Stanley Grove Primary School in Longsight.

Three siblings, all unimmunised, in the family of Cases 1 and 2 did not subsequently develop diphtheria, nor were they carriers. Similarly, none of the family contacts of Cases 3 and 4 developed the disease or were found to be carriers. Two siblings in the Case 3 family and two in the Case 4 family had never been immunised (one was a two-week-old infant). The two remaining siblings in the Case 4 family had received a full primary course but no booster injection.

The retrospective cases

The investigation of Case 4 revealed a 3-year-old brother who had died in the intensive care unit of a local hospital on 2nd January, 1971. On retrospective review the cause of death was considered to be acute diphtheritic tracheo-bronchitis (Case 5). This child had never been immunised.

A mother and her two children of 6 and 8 years of age, who were admitted to Monsall Hospital on 26th February as virulent diphtheria carriers, were subsequently considered to have been clinical cases (Cases 6, 7 and 8). This family lived less than a quarter of a mile away from the previous cases, and the two children had attended the Stanley Grove Primary School. Neither of the children had been immunised, and the mother was a pseudo-positive Schick test reactor.

None of the cases in either the early or retrospective group had ever resided abroad.

The diphtheria carriers

The swabbing revealed 28 carriers of virulent diphtheria organisms, who were immediately admitted to Monsall Hospital (this number excludes Cases 6, 7 and 8, who were originally hospitalised as carriers). A further 22 carriers of non-virulent diphtheria organisms were also detected.

Although throat and nose swabbing of contacts was continued until 19th March, no carriers of virulent organisms were detected after 27th February. The temporal distribution of the virulent organism isolations was:—

10th–13th February	21 isolations
16th–19th February	5 isolations
25th–27th February	2 isolations

Diphtheria organisms were isolated from the throat only in 64 per cent of both the virulent and non-virulent carriers, the remainder being equally divided between isolations from the nose only and from both nose and throat. (Virulent diphtheria organisms were also isolated from both the nose and throat of Cases 1, 3, 4 and 6, and from the throat only of Cases 7 and 8. No organisms were isolated from either the nose or throat of Case 2).

Throat and nose swabbing of the contacts was conducted by a number of health visitors and nurses, and a member of the staff of the Public Health Laboratory at Withington Hospital arranged for them to receive instruction in the appropriate technique. In the initial stages of contact-tracing each health visitor or nurse was accompanied by a public health inspector, who was responsible for recording the relevant family details. After the initial swabbing, all child and adult contacts were re-swabbed at least twice in the following two to three weeks. On these occasions only the health visitor or nurse attended. Thus, more than 3,000 persons were swabbed and over 11,000 throat and nose swabs obtained. On several occasions 1,000 swabs per day were being delivered to the Public Health Laboratory at Withington Hospital. Over 90 per cent of these contacts lived within one mile of Stanley Grove School.

The virulent diphtheria carriers

Four of the carriers of virulent organisms were adults, two were pre-school children, and all were members of families with school-child virulent carriers. Of the remainder, 20 carriers attended the Stanley Grove School—3·5 per cent of the 564 children at this school who were swabbed. Three children attended three other schools, but all were members of families with virulent organism carriers who attended Stanley Grove School. At these three schools 920 children were swabbed, with negative results.

Twenty-four of the 28 virulent organism carriers lived within one quarter of a mile of Stanley Grove School, seven of them residing in the block of Corporation-owned flats. The remainder lived within one mile of this school. Twenty-one virulent organism carriers were members of seven family groups, and there was no close domestic association between these carriers except for the seven living in the block of flats where Cases 1, 2 and 3 had occurred (Cases 4 to 8 also lived within one quarter of a mile of the school).

A review of the immunisation of the 25 child carriers of virulent organisms revealed that two had never been immunised, eight had received a primary course of three injections only, six, including four relatives, had received less than three injections, while nine had had a full primary and booster course.

The non-virulent carriers

The carriers of non-virulent organisms included four adults, one of whom was a teacher at Stanley Grove School, and 18 children of primary and secondary school age, four of whom attended Stanley Grove School. Four of these carriers lived within one quarter of a mile of the school, and the remainder within one mile. Thirteen carriers lived in five family groups.

The immunisation campaign

At the start, in order to simplify the administrative procedure, it was decided not to attempt to identify the children in need of a booster injection, but to offer immunisation to all children below 16 years of age.

While the Stanley Grove school-children were on half-term holiday, plans were made to commence immunisation, with parental consent, on their return to school on Friday 19th February. By publicity in the press, etc., parents of children living in, or attending schools in, the Longsight area, were encouraged to bring all their children under 16 years of age for immunisation during the weekend, 20th and 21st February. These efforts produced over 6,500 immunisations.

The campaign to offer immunisation to all pre-school and school-children in Manchester started on Wednesday, 24th February, and was virtually completed by 19th March. Parents with pre-school-children were encouraged to attend special sessions at their local child health centre or their family doctor. By 19th March more than 70,000 school-children (67 per cent of the school population) had been immunised at special sessions held in schools, but only 5,000 pre-school-children attended special immunisation sessions at child health centres.

School-children under the age of 12 were given the normal dose (0.5 ml. = 25 Lf. Units) of adsorbed diphtheria/tetanus antigen. For older school-children the dose was reduced to 0.2 ml. (= 10 Lf. Units). Triple antigen or diphtheria/tetanus antigen was given to pre-school children. Schick testing was not carried out, and there were few reports of severe local reactions occurring amongst the older children.

Subsequently, it transpired that, of the 75,000 children immunised, 14,000 of them had never previously had a diphtheria antigen injection. Consequently, from the end of March to mid-April, second doses were offered and 11,500 children immunised—an 82 per cent response. These primary courses were completed in the period November–December, 1971, with an 80 per cent response.

Stanley Grove Primary School

This is a county primary school housed in a rambling building typical of those erected at the turn of the century. Need for expansion has been met by the addition of prefabricated buildings in the past, and, more recently, by a

two-storey brick-built extension with new toilet accommodation. More than 500 day pupils attend. The immediate play area is small, with dustbins and food refuse bins much in evidence. Happily, opposite the school a small enclosed grassed area has been provided for organised games. The school is approached by crossing busy main roads as well as by a litter-strewn tunnel under the adjacent main southern railway line out of the City.

During the half-term holiday the interior of the school was washed down, using normal detergents. The procedure was repeated after the special immunisation sessions held over the weekend of 20th and 21st February. At no time was the school closed because of the outbreak.

The late follow-up

After discharge from hospital, the cases and virulent carriers were swabbed at the end of the first week and then once weekly for four weeks. Children were allowed to return to school after the first negative swab following discharge from hospital. Swabbing at monthly intervals was continued until October, 1971, with no reversions to the carrier state.

Organising the operation

The planning and co-ordination necessitated frequent meetings of a team of professional, administrative and clerical staff of the Health Department. Three meetings between senior staff members of the Public Health Laboratory, of the Regional Hospital Board and of the Health Department ensured the liaison essential for a smooth combined operation. Head teachers were kept informed of developments, and their unstinted co-operation must be acknowledged.

It has been estimated that the administration alone involved at least 1,700 hours of the time of Health Department professional, administrative and clerical staff. The immunisation campaign involved a total of 850 doctors' sessions, 1,100 nurses' sessions and 850 clerks' sessions. At the peak, 20 doctors were employed daily on immunisation work.

40 health visitors and nurses spent 2,000 hours, and 10 public health inspectors 400 hours, in contact-tracing, swabbing and surveillance. The ambulance and transport service was involved for 375 hours.

The cost

Vaccine and syringes alone incurred an expenditure of £4,500, while overtime and payments to additional staff amounted to a further £3,000. With increased car mileage claims, stationery and other miscellaneous charges, the total estimated cost of this exercise was around £9,000.

Commentary

A period of four weeks elapsed between the first (retrospectively diagnosed) case and the second case of diphtheria. The third case did not become ill until six weeks after his brother (the first case) had died of diphtheria. The last three cases of the eight, that were detected only by contact-tracing and swabbing, were hospitalised three weeks after the second case was first diagnosed.

There is little doubt that the primary school was the focal point from which the infection spread, to produce either cases or carriers of virulent organisms—the latter becoming apparent as a result of intensive swabbing.

The response from the parents of pre-school-children to the offer of special immunisation sessions at child health centres was disappointing, compared with the response of the school-children's parents to the offer of immunisation while their child was at school. At the best, one must conclude that some parents had difficulty in attending with their children.

By the end of 1970, 62 per cent of children born in 1968 and 70 per cent of children born in 1967 had received a complete primary course of diphtheria immunisation. With the introduction of computer facilities in 1967, the even lower immunisation rates of the early 1960's were increased. However, the relatively low immunisation rate of 1970 must be improved upon if similar outbreaks are to be prevented in the future. In this respect attention is being directed not only to immunisation in early infancy but also to immunisation at or around school entry.

With a total population of around 550,000 and an under-15-year-old child population of more than 140,000, this outbreak of diphtheria presented the Manchester Health Department, hospitals and the Public Health Laboratory with a serious challenge. While these services were on occasions stretched, at no time was there ever any possibility of over-straining them. That the outbreak was speedily and successfully overcome was a direct result of the effective co-operation between these services, in association with general practitioners and head teachers.

Dysentery

265 cases with no deaths.

The number of cases notified or otherwise ascertained, which were subsequently confirmed, was 265 compared with 269 in 1970; 141 cases were confirmed bacteriologically, *Shigella sonnei* being identified as the causal agent in 93 cases and *Shigella flexneri* in 48 cases. There were outbreaks of *Shigella sonnei* dysentery at one day nursery and one private nursery. There was an outbreak of *Shigella flexneri* (type 6) dysentery at a special school for mentally handicapped children; this is summarised below:—

Flexner dysentery first appeared in endemic form in June, at the Piper Hill School and Residential Unit for mentally handicapped children; there were 14 isolations of *Shigella flexneri* from the 24 children in the residential unit and five isolations from 100 non-residential children.

Following the resumption of school after the summer holiday, there were eight isolations from residential children and nine from non-residential children in October and November. Of the eight residential children, five had previously been positive in June, while only one of the non-residential children had had a positive result previously. In December, one residential child who was a positive excretor in October again became positive, while three non-residential children, previously positive excretors, again gave positive specimens.

In October, two residential children, and in December one residential child, were hospitalised in an attempt to eliminate the carrier state. Thus, between June and December, 17 residential children (75 per cent of the total number of children in residence) and 13 non-residential children (13 per cent of the non-residential children) were positive excretors of *Shigella flexneri*. In four of the families of non-residential children, other members of these families were found to be positive excretors of *Shigella flexneri*.

Since all efforts to eliminate this endemic infection were not successful, the school was closed on 17th November and did not re-open until 3rd January, 1972. During the period of school closure, in both the school and residential unit, an intensive programme of cleaning and sterilizing premises and equipment was instituted. The techniques of hygiene were reviewed and deficiencies remedied and all residential children and staff commenced a 10-day course of antibiotic therapy.

During the period of school closure all non-residential children and their families and also the residential children and all staff of both school and residential unit, were required to submit faeces specimens. When the school re-opened no child was allowed to attend unless a minimum of six consecutive negative faeces specimens had been provided at not less than two day intervals. Routine surveillance of all children returning to school will be maintained by the submission of one faeces specimen weekly for an indefinite period of time.

Encephalitis (acute)

3 cases with 2 deaths.

The Registrar Generals' officer notified the Health Department of two deaths; a child aged 4 years and a man aged 30 years, both of whom died from viral encephalitis. The one remaining case notified was a child aged 7 years.

Food poisoning

For details see page 81.

Infantile gastro-enteritis

299 cases with 4 deaths.

There were 299 cases of infantile gastro-enteritis notified voluntarily by local children's hospitals, under the scheme instituted in 1969 and discussed in the annual report for that year. There were four deaths from this disease; the youngest was a child of seven weeks and the oldest a child of six months.

The monthly distribution of cases and deaths (in parenthesis) was as follows :—

January	46 (1)	May	27	September	20 (1)
February	25 (2)	June	20	October	21
March	20	July	21	November	26
April	20	August	21	December	32

In 1970, there were 302 cases of infantile gastro-enteritis with seven deaths.

The home circumstances of all cases were investigated jointly by a health visitor and public health inspector.

Infective jaundice

204 cases with 2 deaths.

The number of cases notified was 204 compared with 303 in 1970. The monthly distribution of cases (deaths in parenthesis) was as follows:—

January	8	May	8	September	25
February	11 (1)	June	23 (1)	October	21
March	45	July	15	November	15
April	13	August	1	December	19

Influenza

There were 12 deaths from influenza compared with 99 in the previous year. The deaths were equally distributed throughout the year.

Of the 12 deaths, two were under one year of age, and the remainder were over 60 years of age.

The following report has been provided by Dr. J. O'H. Tobin, Director of the Public Health Laboratory at Withington Hospital.

"No outbreak of influenza occurred during the winter of 1970/71, perhaps due to the severe epidemic of the previous winter. However, the City and conurbation experienced its first summer epidemic with isolations of influenza A2 (Hong Kong) virus being made from March to July. This epidemic was preceded in March by an outbreak of influenza B. Antibody studies showed that up to 10 per cent of the population was infected by the Hong Kong strain during the summer, with most infections occurring in teenagers and pre-school-children. The teenagers were also those mainly involved in the influenza B outbreak with some infection in young adults and primary school children. Following these outbreaks 50–60 per cent of adults of those sampled were immune to Hong Kong virus and over 90 per cent to influenza B. Thus a substantial proportion of the population had still not had Hong Kong influenza by mid-1971, so an epidemic was possible during the winter of 1971/72. Influenza in fact did start in November and continued well into the new year. The cases in the three outbreaks of influenza noted were clinically mild and no obvious increase in the sickness returns was noted even during the winter outbreak at the end of the year. There were only 12 influenza deaths reported during the year and only six of these occurred when the influenza viruses were about.

Respiratory syncytial virus was prevalent as usual during the winter of 1970/71 but was not prevalent during the latter part of 1971. This virus is often scarce when influenza A is prevalent, suggesting that the conditions for spread of these two agents are different.

During the summer, Manchester was involved in the widespread epidemic of Echovirus type 4 which caused mild upper respiratory illness often associated with mild aseptic meningitis in both children and adults. This epidemic started in April and lasted until November, with a peak in June, July and August".

Measles

1,253 cases with no deaths.
The following table shows the number of notifications for the last six years. The number of notifications in 1971 was the lowest ever recorded in Manchester.

Year	1966	1967	1968	1969	1970	1971
No.	3,386	3,204	2,777	2,560	2,905	1,253

Meningitis (acute)

173 cases with 5 deaths.
Of the 173 notifications of meningitis, 6 were meningococcal, 6 were other bacterial, 159 were viral and 2 were unspecified. The majority of the viral cases were the result of an Echo virus strain, which was also responsible for a similar increase of those infections in several other areas of the country. The peak of the viral notifications occurred in the months of June, July and August.

Poliomyelitis

There were no cases and no deaths.
The last case occurred in Manchester in 1962.

Rubella (German measles)

1,522 cases with no deaths.
There were 1,522 cases notified compared with 551 in 1970. The average for the past ten years is 1,532.

Scarlet fever

244 cases with no deaths.
The number of cases notified in 1970 was 209. The average for the past ten years is 244.

Smallpox

There were no cases with no deaths.
The last case occurred in Manchester in 1946.

Tetanus

There were no cases with no deaths.

Typhoid

3 cases with no deaths.

Case 1

A nine year old child returned on 9th May, 1971, from a holiday in Pakistan. He attended school for only two days and then developed a gastro-intestinal upset which included diarrhoea, fever and loss of appetite. Symptomatic treatment was unsuccessful and on 7th June he was admitted to Monsall Hospital for observation.

On 14th July, a blood culture revealed the presence of *Salmonella typhi* organisms. Subsequent surveillance of family, neighbourhood and school class contacts was negative. The child was discharged from hospital on 13th August, 1971, after 45 negative faeces and 46 negative urine specimens. He had never received any TAB inoculation.

The typhoid organism was phage type B2.

On 8th September, 1971, as a result of routine surveillance, a faeces specimen was reported to be positive for *Salmonella typhi*. Treatment and further surveillance were arranged.

Case 2

A 21 year old man returned on 7th August, 1971, from a visit to India. On 12th August, 1971, he became unwell and visited his family doctor. He was admitted to Monsal Hospital next day and a blood culture was reported to be positive for typhoid two days later.

Routine surveillance of contacts was carried out.

The organism was an untypable Vi strain.

Case 3

A family of five persons, two adults and three children, visited Sicily in mid-July and returned to Manchester on 12th September, 1971. The younger son, aged 14 years, became ill during the visit and was treated for typhoid fever, the Widal test results being highly suggestive of typhoid. On returning to Manchester he was reported to be well but next day he developed malaise and vomiting and was attended by the family doctor until his admission as a precaution to Monsall Hospital on 14th September.

While in hospital, all faeces and urine specimens were negative but the Widal was classical for the convalescent stage of typhoid fever. A fall in the Vi antigen titre was an encouraging sign that he was not likely to become a long-term carrier. He was discharged on 29th September, 1971.

This boy had never received TAB inoculation.

Routine surveillance of all contacts was carried out.

Paratyphoid

1 case with no deaths.

A 24 year old man returned with his wife on 28th May, 1971, from a holiday in Paris. While on holiday he reported attacks of mild diarrhoea and on 6th June, 1971, he became unwell with pyrexia and malaise. Following

symptomatic treatment he was admitted to Withington Hospital on 15th June, 1971. Three days later a blood culture was positive for *Salmonella paratyphi B* and he was transferred to Monsall Hospital.

Following the completion of treatment, his faeces remained positive and since he was allergic to ampicillin, no treatment was given to eradicate this convalescent carrier state. He was discharged home on 10th July, 1971, and surveillance instituted. Eight positive specimens were reported following discharge and he remained well. Subsequently, five negative specimens were reported.

He had never received TAB inoculation.

The organism was *Salmonella paratyphi B*, phage type taunton.

Whooping cough

255 cases with one death.

The number of cases notified in 1970 was 485. The average for the past ten years is 507.

The death was a child under one year of age.

Consultations

Medical Officers of the department were actively engaged in the investigation of many of the cases noted. Requests for consultation were received from hospitals general practitioners and nurseries. Technical help was readily available from the staff of the Public Health Laboratory, Manchester, and a large amount of work was carried out by this laboratory as part of the investigations into the cases of diphtheria, typhoid, paratyphoid, dysentery and food poisoning referred to elsewhere in this report. Co-operation between the Public Health Laboratory, Manchester hospitals and the Health Department undoubtedly restricted the spread of pathogenic organisms in the City, and this applied especially during the diphtheria outbreak.

Immunization

Present recommended ages for immunization

Age	Immunization against	
5 months	Diphtheria, whooping cough, tetanus and poliomyelitis	dose 1
6½ months	Diphtheria, whooping cough, tetanus and poliomyelitis	dose 2
12½ months	Diphtheria, whooping cough, tetanus and poliomyelitis	dose 3
1 year 3 months ..	Measles	
School entry	Diphtheria, tetanus and poliomyelitis (for children fully immunized previously)	booster
11–14 years (girls only)	Rubella	
13 years	Tuberculosis (with B.C.G.)	

Since 1967, the Corporation's Leo III computer has been used in the preparation of the immunization programme. Each child's date of birth and the immunization procedures to which the parents have consented are recorded by the computer; from this information the computer subsequently issues, at the appropriate intervals of time, an appointment card to remind the parents to take the child for immunization to the clinic of their choice.

If an appointment is not kept, the computer prepares another appointment and eventually, if three appointments are not kept, the child's name appears on a list of non-attenders. Arrangements are then made for the health visitor for the district to visit the family to ascertain whether the parents still wish their child to be immunized and if so a further series of appointments are made. In the case of a mother having difficulty in attending the child health centre, the mobile immunization unit is asked to call.

Every immunization procedure a child receives is recorded by the computer, so that a complete record is built up of each child's immunization history.

Diphtheria, whooping cough, tetanus and poliomyelitis

**Primary immunizations completed by 31st December, 1971,
of children born in 1967, 1968 and 1969**

	Year of birth	1967	1968	1969
	Number of live births	11,305	10,736	9,997
Diphtheria	Number immunized	9,242	8,091	7,222
	Number immunized as percentage of live births	82	75	72
Whooping cough	Number immunized	7,823	6,988	6,518
	Number immunized as percentage of live births	69	65	65
Tetanus	Number immunized	9,247	8,194	7,222
	Number immunized as percentage of live births	82	76	72
Poliomyelitis	Number immunized	8,027	7,172	6,671
	Number immunized as percentage of live births	71	67	67

The following table gives details of the number of booster doses given to school children for the years 1968, 1969, 1970 and 1971.

Antigen	1971	1970	1969	1968
Diphtheria/tetanus	60,550	4,464	6,141	6,072
Poliomyelitis	3,387	4,397	4,246	4,999

The large number of booster diphtheria/tetanus immunizations was due to the diphtheria outbreak during the early part of the year.

Smallpox

In accordance with the recommendation of the Department of Health and Social Security, from 1st August, 1971, the routine smallpox vaccination of infants was suspended. It is, therefore, not possible to include any tables of these immunizations that are comparable with previous years.

Measles

Primary immunizations completed by 31st December, 1971,
of children born in 1967, 1968 and 1969

Year of birth	1967	1968	1969
Number of live births	11,305	10,736	9,997
Number immunized	3,390	3,326	3,339
Number immunized as percentage of live births	30	31	33

In addition, 56 children born in other years were immunized.

Mobile immunization unit

Work of the mobile immunization unit in 1970 and 1971

Nature of immunization	Number of persons immunized	
	1971	1970
Diphtheria, whooping cough and tetanus ..	1,207	2,080
Diphtheria and tetanus	267	227
Measles	840	533
Poliomyelitis	1,407	2,169
Totals	3,721	5,009

A major reason for the reduction of immunization in 1971 as against 1970 was the diversion of the unit staff to other duties during the diphtheria outbreak. Also, when normal activities were able to resume, the regular driver of the unit resigned and subsequently his permanent replacement by a person with intimate knowledge of the City was not possible.

In September, the twelve-year old vehicle was replaced by a modern purpose-built unit.

Rubella

The first vaccination programme for the immunization of schoolgirls between the ages of 11 and 14 years was carried out between January and March ; the following table gives the relevant details.

Category	1971	
	Number	Percentage acceptance from girls eligible
Schoolgirls eligible	6,936	—
Schoolgirls for whom consents were received	4,444	64
Schoolgirls immunized	4,181	60

B.C.G.

The arrangements for the immunization of child contacts of tuberculosis, newly arrived immigrant children and school children continued.

Child contacts

Sessions for child contact surveillance were held at the Manchester Chest Clinic and in schools.

The following table gives the relevant details :

Number of persons	Contact scheme		
	Health department	Schools	Totals
Skin tested	830	287	1,117
Found positive	284	36	320
Found negative	519	251	770
Immunized	687	—	687

Immigrants

Under the arrangements whereby newly arrived immigrants under 21 years of age are given appointments to attend the chest clinic sessions, a total of 195 attended for Heaf testing. Of these, 95 were negative and given B.C.G. vaccination ; 98 persons who showed a positive reaction were referred for X-ray. Some of these were stated to have received B.C.G. before arrival in this country. Two persons failed to return for the result of their Heaf test to be read. No immigrants were referred for an immediate second X-ray ; eight immigrants were referred for review after six months, and one for clinical examination.

School children

Routine immunization against tuberculosis is offered to all school children when they reach 13 years of age. The annual immunization programme was carried out during the school autumn term.

The following table gives the relevant details compared with 1970 :

Category	1971		1970	
	Number	Percentage acceptance from children eligible	Number	Percentage acceptance from children eligible
School children eligible ..	9,365	—	9,330	—
School children for whom consent was received	8,680	93	7,755	83
School children skin tested by 31st December.. .. .	8,229	88	7,008	75

Influenza

In accordance with the recommendation of previous years from the Department of Health and Social Security, that influenza vaccine should only be offered to priority groups, 1,036 persons were immunized.

Immunization for persons travelling abroad

The following table shows details of immunizations given in the Health Department clinic in 1970 and 1971 :

Antigen	1971	1970
Yellow fever	2,674	2,669
Cholera	1,306	1,211
Typhoid	218	108

International vaccination certificates

In addition to the 2,674 yellow fever vaccination certificates and 1,306 cholera vaccination certificates issued from the Health Department, 12,641 smallpox and cholera vaccination certificates issued by medical practitioners were authenticated in accordance with the International Health Regulations.

Primary immunizations carried out at various clinics

Immunization centre	Numbers of immunizations with each type of antigen									Totals	Percentage immunized at each centre
	Diphtheria, whooping cough and tetanus combined	Diphtheria and tetanus combined	Diphtheria	Whooping cough	Tetanus	Poliomyelitis	Rubella	Measles			
Child health centres ..	4,411	2,408	—	—	1	4,681	—	3,211	14,712	41·6	
Day nurseries ..	74	107	—	—	—	89	—	—	270	0·8	
Schools and school clinics..	3	10,228	15	—	—	603	4,181	—	15,030	42·6	
Mobile immunization unit..	1,037	137	—	1	—	1,162	—	840	3,177	9·0	
General practitioners ..	662	274	2	—	112	611	31	250	1,942	5·5	
Hospitals	89	6	—	—	—	81	—	3	179	0·5	
Totals	6,276	13,160	17	1	113	7,227	4,212	4,304	35,310	100·0	

Venereal Diseases

I am indebted to Dr. Leslie Watt, consultant venereologist and physician-in-charge St. Luke's Clinic, for the following report:

Though a note of caution must be introduced into their interpretation the figures presented for 1971 speak for themselves and show a disturbing increase in the total number of new registrations in the venereal disease clinics. During the past few years the number of maladies on which statistical information is required has increased considerably. Some of these maladies many would regard as trivial. Many ailments, which undoubtedly existed and were treated before, now exist, are treated and in addition are counted. Fortunately the national figure of a quarter of a million registrations at the venereal disease clinics, so widely quoted in the press and television, does not mean a quarter of a million people with a quarter of a million dreadful diseases. It does not even mean a quarter of a million people since multiple conditions are common, especially in females, and each is recorded separately.

The major and serious feature of the year has been the sudden increase in the number of gonococcal infections treated in both sexes, especially in the younger age groups. This steep increase has been expected since during the past few years the national total has risen steadily and even alarmingly, whilst the numbers in Manchester have not kept pace. Since control of venereal infection is never solely a local problem it was inevitable that in due course this area would be affected.

Coupled with the increase in gonorrhoea the number of patients of both sexes who seek advice for other genital conditions is rising. This is a two-edged situation which on the one hand merits encouragement mirroring as it does an increased willingness to seek advice but which, since manpower and resources are never unlimited, threatens to flood the clinics and associated laboratory services with minor ailments. Young staff are difficult to recruit for the clinics and nowhere is the generation gap more obvious than in the venereal disease service where a diminishing number of staff, rapidly reaching retiring age, is treating an increasing number of youngsters for the ailments and fears brought about by the current attitude towards sexual behaviour.

What to do about it is the vexed question. It is trite to comment that since increased promiscuity is the direct cause of dissemination of venereal disease only a reversal of this trend will decrease it. This is a problem for society generally, not solely for the inadequately staffed venereal disease service.

Venereal disease service

The female department at St. Luke's Clinic has been extensively upgraded during the year and a new extension to the out-patient department at Manchester Royal Infirmary was occupied in August, 1971. Premises are now adequate though demolition of buildings round St. Luke's Clinic is rendering it more conspicuous and this may deter some patients from attending. Undoubtedly relocation will become necessary in the foreseeable future.

During the year major staffing problems occurred at all levels and recruitment of all grades continues to pose difficulties.

The traditional open clinic sessions without prior appointment—in effect a sexual casualty service—result in grossly overcrowded evening sessions and underused daytime sessions. Rationalization is inevitable and indeed overdue. When facilities are strained at crowded evening sessions little time is available for other than the essentials of diagnosis and treatment and prolonged and detailed discussion of problems is just not possible.

Incidence of sexually transmissible disease

Table A details the number of new registrations and the total attendances at the clinics in Manchester during 1971. The figures refer to infections or other conditions and not to actual numbers of patients. Individuals may have more than one condition simultaneously or may acquire multiple reinfections within the year under review. An accurate estimate of the incidence of infection in the population is impossible and only trends can be indicated.

For comparison the figures for 1970 are included in brackets. Total new registrations for males have increased by 951 (16 per cent.) to 6,730 and total new registrations for females increased by 498 (21 per cent.) to 2,877. The overall total of 9,607 registrations represents an increase of 1,449 (18 per cent.) over that of 1970.

Multiple diagnosis at the initial attendance is comparatively common in female patients and the total of 2,877 registrations represented 2,444 individuals with 433 (17 per cent.) suffering from more than one recorded condition. In males it is less common and more than one condition was recorded at the first attendance in 197 (3 per cent.) of the total of 6,533 individuals.

At the two clinics 1,940 (30 per cent.) of the 6,533 individual males who attended in 1971 were known to have visited the same clinic on at least one previous occasion for advice or treatment. Of the 2,444 females 525 (21 per cent.) had previously sought advice. Some other patients move between the two clinics and an unrecorded number have previously attended elsewhere.

Acquired syphilis

Early infectious syphilis remains a minor problem. Table B details the number of patients treated for early syphilis in the clinics during the past decade. In 1971 a total of 26 patients (21 males and 5 females) was treated. The males comprised 2 foreign seamen infected abroad, 10 homosexuals, 4 of whom were infected abroad and nine other males, six of whom were infected locally and 3 elsewhere in the United Kingdom. Of the females 4 were infected locally and the other abroad.

After an isolated increase in the number of patients treated for late syphilis in 1970, the number in 1971 fell by 17 (33 per cent.) to 35 (23 males and 12 females) almost returning to the level of previous years.

Congenital syphilis

One female infant suffering from congenital syphilis was seen in the clinics in Manchester during the year. This disease is readily preventible given the co-operation of the infected mother. Unfortunately the very mothers who through ignorance or neglect fail to seek antenatal care are those who are most liable to have untreated infectious venereal disease. Without some co-operation from those most intimately concerned, no preventive measure can be foolproof.

Late congenital syphilis was diagnosed in 20 patients (4 males and 16 females) all over the age of 15 years.

Gonorrhoea

Table C shows the number of infections with gonorrhoea treated in males in the clinics in Manchester during the year. In 1971 the number of infections in males increased by 240 (13 per cent.) to a total of 1,994 and in females by 165 (22 per cent.) to 912. The overall total increased by 405 (16 per cent.) to 2,906. In addition 3 infants with gonococcal ophthalmia were seen and one with gonococcal vulvo vaginitis.

This steep increase has been expected. It has also become apparent during the year that some patients are requiring more penicillin to effect a cure and this may give a pointer that the situation which has existed in London for the past few years could well be reproduced in Manchester in the near future.

Venereal disease in young people

One boy aged 17 years and one girl aged 19 years were treated for early syphilis in 1971. Their infections were not associated.

Table D shows the number of gonococcal infections occurring in the different age groups during the past five years. The steady increase amongst the younger age group which has been apparent for a decade, has accelerated rapidly during 1971. The number of young boys under the age of 20 years treated for gonococcal infections during the year was 228 which as in 1970 represented 11 per cent. of the total in males. The actual number of infections treated rose by 36 (18 per cent). This compares with the overall increase in males of 13 per cent.

The number of infections in females under the age of 20 years rose by 71 (28 per cent) to 320. This compares with an increase of 22 per cent in the total number of infections treated in females and an increase of 94 (19 per cent) in the older age groups. Infections in young females below the age of 20 years have now increased to 35 per cent of all infections treated in females.

Compared with 1967 the number of infections treated in young males has increased by 67 (41 per cent) and in young girls by 133 (71 per cent). The total numbers are not high relative to the population served but such an increase over five years with the steep rise in 1971 must inevitably cause concern. The increase in infections in the under-16 age group is even more worrying and parallels the increase in therapeutic abortion in the under-16 age group and the same conclusions must inevitably be drawn. It can only represent increasing promiscuity at an earlier age among what we can but hope is a minority of our young people.

Other conditions

Any genital abnormality may prompt an individual to seek advice in the clinics irrespective of the cause and in addition guilt and fear produce some bizarre reasons for attendance. These other conditions are often multiple or may occur as coincidental findings in association with statutory venereal disease.

This heading also includes patients who attend for reassurance only and in 1971 of the total new registrations, 1,315 males (19 per cent) and 502 females (19 per cent) showed no physical abnormality. A surprising number of these patients do not even bother to return for the results of the tests which they so earnestly desire.

Including those requiring reassurance only, the total of other conditions in males and females in 1971 was 6,615 an increase of 1,054 (19 per cent) over 1970 and of 2,648 (66 per cent) over the past five years.

Venereal diseases social worker

One health visitor is seconded full-time by Manchester Corporation for contact tracing. This is a very difficult task demanding great tact and patience. During the year a total of 41 contacts who would not otherwise have attended the clinic was traced.

TABLE A.
1971. Summary of new registrations and attendances, Manchester clinics
(1970 totals in brackets)

	<i>Males</i>	<i>Females</i>	<i>Total</i>
Early Syphilis	21 (17)	5 (6)	26 (23)
Late Syphilis	23 (33)	12 (19)	35 (52)
Congenital Syphilis ..	4 (4)	17 (11)	21 (15)
Gonorrhoea	1995 (1754)	915 (753)	2910 (2507)
Other Conditions	4687 (3971)	1928 (1590)	6615 (5561)
Total new registrations	6730 (5779)	2877 (2379)	9607 (8158)
Total attendances ..	16715 (15350)	6908 (6209)	23623 (21559)

TABLE B.
Early acquired syphilis. Manchester clinics

<i>Year</i>	<i>Males</i>	<i>Females</i>	<i>Total</i>
1962	16	5	21
1963	23	9	32
1964	13	3	16
1965	31	16	47
1966	9	5	14
1967	30	5	35
1968	40	9	49
1969	31	4	35
1970	17	6	23
1971	21	5	26

TABLE C.
Gonorrhoea. Manchester Clinics

<i>Year</i>	<i>Males</i>	<i>Females</i>	<i>Total</i>
1962	1947	555	2502
1963	1831	569	2400
1964	1899	573	2472
1965	1547	464	2011
1966	1781	573	2354
1967	1830	673	2503
1968	1752	706	2458
1969	1741	779	2520
1970	1754	747	2501
1971	1994	912	2906

TABLE D.
Age groups of male and female patients treated for gonorrhoea.*
Manchester clinics

<i>Age (years)</i>	1967		1968		1969		1970		1971	
	M	F	M	F	M	F	M	F	M	F
Under 16	—	6	3	6	4	6	2	8	5	16
16 and 17	30	54	31	73	31	73	40	91	66	120
18 and 19	131	127	143	149	146	175	150	150	157	184
Total under 20	161	187	177	228	181	254	192	249	228	320
per cent under 20	9	28	10	32	10	32	11	33	11	35
20 to 24	559	214	475	213	506	271	527	262	567	297
25 plus	1092	272	1100	265	1054	254	1035	236	1199	295
Totals	1812	673	1752	706	1741	779	1754	747	1994	912

*Accidental gonococcal vulvo-vaginitis in female children and gonococcal ophthalmia neonatorum excluded.

In 1971, 3 infants with gonococcal ophthalmia neonatorum and 1 child with gonococcal vulvo-vaginitis were treated.

Occupational Health

With the appointment in June of a Deputy Principal Medical Officer to take charge of the occupational health service, the gradual but limited expansion of the service envisaged in 1968 became possible. The success of such a service is dependent on the maintenance of a good working liaison with employing departments and with employees. The service must be seen to operate for the benefit of both employee and employer and in all situations strict professional relationships must be maintained and there must be no suggestion of exploitation so that employees become sceptical of actions taken in their interests or on their behalf.

Pre-employment medical review

The SELNEC transport authority provides its own occupational health service and referrals to the Medical Officer of Health are made only for the purposes of retirement on medical grounds. The majority of the personnel of the Manchester and Salford Police Force receive medical surveillance from specially appointed doctors, as do the operational staff of the Fire Brigade.

For selected groups of employees of the Health Department, the Social Services Department and the Education Department, medical examination and/or chest X-ray is required before employment and subsequently chest X-rays are repeated at two yearly intervals.

Selected groups of employees of the Waterworks Department and of the Markets Department have a medical examination and/or bacteriological examination before employment, followed by repeat investigation at yearly or three-yearly intervals.

As a minimum requirement, all prospective non-manual employees must complete a medical questionnaire, but for the majority of prospective manual employees there is no medical surveillance prior to employment in the Corporation service. The screening of these medical questionnaires is carried out by a senior medical officer of the Health Department. In cases where there is no special departmental need for a medical examination or other investigation, further medical investigations are required in only a minor proportion of instances. There were 2,286 questionnaires checked in 1971 and it was necessary for medical examination and/or chest X-rays to be carried out in 712 of these cases. Only 13 applicants were considered to be medically unfit for employment.

Long term sickness absence

The Medical Officer of Health, at the request of employing committees and heads of departments and with the permission of the employees concerned, obtained confidential medical reports on employees absent from duty due to sickness for prolonged periods of time, or when their entitlement to sickness benefit was about to expire. Subsequently one employee was referred for medical examination by an independent consultant and 17 were found alternative light work.

Retirement for medical reasons

The Medical Officer of Health recommended the retirement, for medical reasons, of 198 employees of the Corporation who were incapable of carrying out their duties and for whom no suitable alternative work was available. The following table shows the number of employees retired for each main type of incapacity :—

Nature of incapacity								Number of cases
Malignant neoplasms	..	..	..	..	..	..	..	7
Ischaemic heart disease	..	..	..	..	..	..	..	53
Cerebro-vascular disease	..	..	..	..	..	..	..	10
Hypertension	..	..	..	..	..	..	..	15
Other diseases of the circulatory system	..	..	..	..	..	..	..	5
Bronchitis	..	..	..	..	..	..	..	22
Other respiratory disease	..	..	..	..	..	..	..	3
Genito-urinary disease	..	..	..	..	..	..	..	2
Diseases of nervous system	..	..	..	..	..	..	..	10
Arthritis	..	..	..	..	..	..	..	24
Other diseases of bones and joints	..	..	..	..	..	..	..	9
Diabetes	..	..	..	..	..	..	..	1
Diseases of digestive system	..	..	..	..	..	..	..	4
Neurosis and psychosis	..	..	..	..	..	..	..	22
Injuries	..	..	..	..	..	..	..	5
Other causes	..	..	..	..	..	..	..	6
								198

Town Hall clinic

The staff welfare, first-aid and immunization clinic, situated in the Town Hall Extension basement, again operated most satisfactorily and was used regularly for medical consultations. Chiropody sessions were provided for patients who find a centrally located clinic more convenient. Sessions for cervical cytodiagnosis were continued. Details of the routine work carried out in this clinic include :—

Reason for attendance										Number							
Treatment of injury and illness					first attendances					..	..	1,985			
					total attendances					..	..	2,525			
Medical interviews i.e. suitability for normal work after illness, personal and social problems, etc.										42	
Home visits to Corporation employees on sick leave										21					
Medical examinations										1,241
Immunization					Yellow fever					..	..	..	2,674	
					Cholera, T.A.B, Typhoid					..	1,524						
					Smallpox					..	..	..	46	
					Tetanus					..	..	..	143	
Chiropody										447
Cytodiagnosis										438

One of the Manchester Regional Hospital Board Mass Radiography Units continued to be located in the clinic one day per week, with the sessions extended in to the early evening to give general practitioners' patients more opportunity to attend.

In addition the clinic staff took 35 blood samples for Widal tests at various reservoirs on behalf of the Waterworks Department.

Analysis of medical reviews

The following table relates to the number and type of medical reviews conducted for pre-employment and general purposes and the number of retirements due to medical incapacity.

Department	Pre-employment medical questionnaires examined	Pre-employment medical examinations and/or X-rays	Retirements due to incapacity	Miscellaneous medical reviews	Bacteriological investigations
Airport	113	59	1	18	—
Art Galleries	11	1	—	3	—
Baths	1	1	—	3	—
Children's (To 25.5.71)	71	51	—	5	—
City Architect's	55	5	1	4	—
City Engineer and Surveyor's	267	64	6	36	—
City Estates and Valuation	30	4	—	—	—
City Planning	14	2	—	2	—
City Treasurer's	82	4	1	5	—
Cleansing	2	—	6	85	—
Direct Works	47	11	24	47	—
Education	—	—	30	33	—
Fire Brigade	7	1	1	2	—
Health	393	159	4	34	19
Housing	116	16	1	2	—
Libraries	107	15	—	1	—
Lord Mayor's	1	—	—	—	—
Magistrates	16	—	—	1	—
Markets	3	3	2	7	24
Parks.. .. .	14	2	2	10	—
Police	92	21	—	9	—
Probation	5	—	—	—	—
Rivers	50	4	—	15	—
Social Services (From 26.5.71)	570	266	—	18	—
Stationery	8	—	—	—	—
Town Clerk's	106	7	3	3	—
Town Hall Superintendent's	3	1	2	2	—
Transport	—	—	105	105	—
Waterworks	77	8	6	20	161
Weights and Measures	6	1	—	—	—
Welfare (To 25.5.71) ..	19	6	3	17	—
Totals	2,286	712	198	487	204
For other local authorities ..	—	—	—	41	—
Grand totals	2,286	712	198	528	204

Other Medical Reviews

Examination of Waterworks Department staff

During the year, 57 new and existing Waterworks Department employees who had not previously been tested had a Widal test and bacteriological examination of faeces and urine specimens. Subsequently, 17 were considered to be "suspicious", having raised blood titres which required further bacteriological tests in order to eliminate the possibility of a carrier state. By the end of the year, nine of these employees had been cleared, two had left the service, leaving six where tests were still continuing.

In no instances were Salmonella or dysentery organisms isolated.

In accordance with the Ministry of Housing and Local Governments recommendation of "Safeguards to be adopted in the Operation and Management of Waterworks", which suggested three yearly testing of waterworks employees, 104 employees submitted faeces and urine specimens for bacteriological examination. Of this total, 19 were considered to be "suspicious", having raised blood titres which required further bacteriological tests. By the end of the year, ten of these had been cleared, leaving nine where tests were still continuing.

Included in the ten employees who had been cleared by the end of the year were two labourers, from whom Salmonella organisms were isolated from faeces specimens. They were immediately excluded from work. After submitting the required number of consecutive negative faeces specimens, they were allowed to resume unrestricted employment.

Examination of abattoir staff

Under the legislation requiring the compulsory medical screening of abattoir staff engaged in the handling of meat for export, selected Health and Markets Department employees, together with the appropriate employees of the Meat and Livestock Commission and one firm of market traders were examined medically and bacteriologically.

There were 125 medical examinations performed and in association with these 300 samples were submitted to the Public Health Laboratory for bacteriological examination. Subsequently 102 "Freedom from Infection Certificates" were issued; 23 certificates were withheld pending the outcome of further bacteriological examinations.

Medical review of hackney carriage drivers

It is necessary for applicants to the Licensing and Fire Brigade Committee for hackney carriage licences to submit medical reports completed by their family doctors. In these reports, special attention is directed to the presence of eye and ear defects, heart disease and diseases of the nervous system. New applicants numbered 438 whilst 95 renewal applications were submitted. In one case it was necessary to recommend the rejection of the application.

Exemption from parking meter charges for disabled persons

Disabled persons using invalid carriages or motor vehicles and who need to park such vehicles in the city centre, can be provided with badges exempting them from parking meter charges. The Medical Officer of Health considers applications for such exemption and 60 new applications were approved. Two hundred and fifty-nine were renewed for a further year.

Epilepsy and driving

The Motor Vehicles (Driving Licences) Regulations, 1970, enables persons suffering from epilepsy who could satisfy certain specified medical requirements, to be granted a driving licence.

Twenty-seven new applicants and 16 renewal applications were submitted. In one case it was found necessary to reject the application.

Concessionary travel

Under the Transport Act, 1968, Section 138 (5c), applications for concessionary travel for disabled persons (males aged 16 to 65 years, females aged 16 to 60 years) were considered by the Medical Officer of Health from 1st April, 1971.

Two hundred and twenty-seven applications were received and after receiving the relevant medical documents, the Medical Officer of Health was able to recommend that all but five should receive a concessionary travel pass.

Cremation certificates

The Medical Officer of Health is medical referee to the Blakley Crematorium and Doctors A. E. Jones, A. Butterworth and J. F. Cawley are appointed deputy medical referees. There were 1263 certificates examined and, although in some instances further information had to be obtained, on no occasion was it necessary for the medical referee to withhold signature subsequently.

Health Control at Manchester Airport

The Medical Officer of Health is responsible for health control at the airport and also for medical inspection of aliens and Commonwealth immigrants arriving at the airport.

Health control includes clearance of aircraft and passengers arriving from infected areas. As far as the United Kingdom is concerned, all passengers arriving from smallpox infected areas should have a valid smallpox vaccination certificate, and all passengers arriving from cholera infected areas should have a valid cholera vaccination certificate. In the absence of a valid smallpox certificate, passengers are offered vaccination at the airport. Arrangements are made to ensure medical surveillance of these vaccinated passengers and also passengers who refuse vaccination or who are excused vaccination on account of medical contra-indications. Arrangements are also made to ensure medical surveillance of passengers unable to produce valid cholera certificates.

Medical clearance of passengers on scheduled flights from smallpox and cholera infected areas, or from areas where certain other diseases have been notified, causes little difficulty, as customs officials at the airport always give the Health Department adequate advance notice. Difficulties arise when unscheduled aircraft are diverted to Manchester from other airports on account of fog or other adverse local conditions. Notice of arrival in such circumstances is often not more than 10 to 15 minutes.

Health control duties are carried out by local health authority, medical and lay administrative staff, in addition to their other duties.

The number of aircraft cleared during 1971 was 170, compared with 152 in 1970.

In September, 1971, N.E. Spain was declared a cholera infected area, and between the 9th September and the 11th October, 1971, 109 aircraft arriving from both Barcelona and Gerona airports received health clearance. Names and addresses of passengers not possessing a valid vaccination certificate for cholera were forwarded to the appropriate local health authority.

Facilities are provided for the medical examination of individual passengers suspected of having infectious diseases, if requested by the pilot of an aircraft. The most frequent symptoms in adults in such cases were vomiting and diarrhoea, and on one occasion the symptoms were so severe that the affected passenger was admitted to hospital locally. Arrangements were made for medical surveillance and bacteriological examination of stools of 13 passengers who were allowed to proceed home. On six occasions young children returning from holiday were found to have chickenpox. All were allowed to proceed with their parents with medical surveillance at home. Medical examination of immigrants was carried out by local health authority medical staff, and by a number of authorised general practitioners who practise in the vicinity of the airport.

There were 1,037 Commonwealth immigrants and 24 aliens medically examined under the Commonwealth Immigration Acts, 1962 and 1968, and the Aliens Order, 1953. compared with 630 Commonwealth immigrants and 8 aliens in 1970.

Immigrants and Aliens referred for Medical Examination

Year—1970				Year—1971			
West Indian	Pakistani	Other	Total	West Indian	Pakistani	Other	Total
508	28	102	638	327	589	145	1061

Names and addresses of long stay immigrants were forwarded to the medical officers of health of the local health authorities concerned, to enable them to make contact with the immigrants and acquaint them of the health facilities available for them.

In addition, the names and addresses of all persons admitted conditionally were notified to the medical officer of health of the area to which they were proceeding, to ensure medical surveillance.

No Commonwealth immigrants were refused admission for medical reasons by the immigration officer, but one alien was refused admission on medical grounds by the immigration officer. Four Commonwealth immigrants were admitted conditionally.

Radioactivity

Radioactive Substances Act, 1960

By the end of 1971, 32 certificates of registration under section 1, and 8 certificates of registration under section 3, together with 8 certificates of authorisation under section 6, and 3 under section 7 had been issued to

firms and establishments in the City by the Department of the Environment. Section 1 registration refers to the keeping and use of radioactive material, section 3 registration refers to the keeping and use of equipment such as industrial radiography machines. Section 6 authorisation refers to the disposal of radioactive waste and section 7 to the accumulation of such waste.

Nuclear Installations Act, 1965

There are no nuclear site licences applicable in respect of industrial sites within the City.

Arrangements for dealing with incidents

These national arrangements were scheduled in Ministry of Health Circular 3/64 and H.M. (65) 82. The Manchester Royal Infirmary is the designated hospital in this region prepared to accept radiation casualties. Liaison between this hospital, the University of Manchester Radiological Protection Service, the Christie Hospital, Manchester, and the Health Department was established some years ago and has been maintained.

School dental radiography

The routine film-badge personnel monitoring service, first provided by the Regional Centre of the Radiological Protection Service in 1967, was continued. All exposures were reported as low and well within the permitted dose range.

Teaching establishments

The second and third reports of the investigation into the uses of ionizing radiations in Manchester Schools and Colleges of Education were presented by the University of Manchester Radiological Protection Service. There were no significant changes in the stocks held by schools and colleges of education. A total of 32 establishments held radioactive sources, the total activity of all these sources being 1 millicurie. Eight other establishments were reported not to be using radioactive sources. In view of the frequency of break-ins at schools—only eight of the 32 establishments had never had a break-in—particular attention was given to the security of sources.

Concerning non-ionizing radiation, the reports emphasise the fact that apparatus for producing laser beams is now available for schools use. While lasers do not produce ionising radiations, the intense coherent light is particularly dangerous to the eye and therefore control of the use of lasers is essential. For this purpose, the Department of Education and Science published in February, 1970, Administrative Memorandum 7/70 entitled "Use of lasers in schools and other educational establishments".

Training

In April, the University of Manchester Radiological Protection Service provided a further two day course on "Radiological Protection in Public Health" and in September a two day course on the "The use and hazards of laser beams and microwaves". Staff from the Health Department and other Corporation Departments attended these courses.

Acknowledgment

The Director of the Radiological Protection Section at Christie Hospital and the University of Manchester Radiological Protection Officer have been most willing at all times to give professional advice and assistance. This co-operation and liaison is sincerely appreciated.

Health Education

All sections of the Health Department have again contributed to the work of health education during the year, and the number of enquiries received from students at schools and colleges for data to assist them with projects and theses on the various aspects of public health has continued to increase. Help was given wherever possible and the Annual Report of the Medical Officer of Health, giving, as it does, a comprehensive account of the work of the department, was a most useful source of information.

Publicity material on many health topics was again obtained from the Health Education Council and RoSPA and was distributed for display in departmental establishments and to anyone seeking posters and leaflets for educational purposes. The Health Department also produced a poster of its own on the "Present recommended ages for childhood immunization". This was distributed for display in departmental establishments, surgeries of all general practitioners on the local executive council list and in local hospitals.

A number of medical and other public health workers from the United States visited the department and comprehensive programmes were arranged for these visits. A group of overseas administrators also visited the department on a Special Aspects Course. A course was organised in conjunction with the University of Manchester whereby fourth year medical students would spend eight half-days reviewing some of the department's work, especially that involving clinic and health centre activities.

Health education involved every aspect of the health visitor's work and every stage in human development. The mother of the new-born baby was often in need of instruction not only in the positive skills required in caring for the baby but, equally important, in the preventive ones needed if the baby was to be safeguarded from falling victim to illness or disease. Stress was laid on the necessity for speedy immunization and vaccination. It is already too late if these are postponed until such times as the relevant diseases have become epidemic.

The health visitor continued to be privileged in that she was able to speak to parents in their own homes at a time when they were most receptive—namely, on the arrival of the new baby.

As the baby grew and developed she was concerned that the parents should be fully instructed in the need for personal hygiene and also be competent to impart this knowledge to their offsprings.

Schooling and adolescence presented additional health hazards and once more she was at pains to bring to the notice of growing youngsters the dangers inherent in infestation, smoking and drug taking.

Health education propaganda helped the health visitor in her task. Lectures, posters and films were used to bring to the notice of the public the dangers to which their health may be exposed and also the many aids available to them in time of need.

Health visitors, experienced in this field were invited by headteachers to give talks in schools where a comprehensive programme on health and hygiene was followed. The importance of immunization, personal hygiene and the harmful effects of smoking was focussed by the display of posters in school clinics and offices.

Schools were also visited by dental auxiliaries who gave talks, demonstrations and showed films on dental hygiene. There were 4,662 children, who attended at the dental clinics for prophylactic treatment, and who received chairside instruction in dental health.

The Manchester Regional Committee on Cancer continued to be very active in the field of health education and the Executive Officer of the Educational Project of this Committee has supplied the following report:—

“No other group of serious diseases offers so great a possibility of immediate improvement as do the cancers. There are still many thousands of patients dying of cancer who could have been cured had they been treated at an earlier stage of the disease. A recent government report, for instance, draws attention to the entirely unacceptable number of deaths from mouth cancer alone. And many thousands more are dying of diseases such as cancer of the lung and cancer of the cervix uteri that need not have arisen at all.

None of our modern techniques of treatment or of preventing the disease can possibly achieve their potential if the public do not make use of them in time. To correct the mistaken ideas and allay the excessive fears of cancer that are such a barrier to any improvement in the cure-rates should be a first priority; and it may be thought disgraceful that no national scheme of information and education, and few regional schemes, exist on a scale commensurate with the gravity of the problem.

However, many local authorities in the North-West are among the very few in Britain that have shown active concern. Among these the City of Manchester continued its long association with the work of the Manchester Regional Committee on Cancer, which maintained its service of advice, information and education in the City during the year. The Committee believes that nothing less than the full co-ordination of cancer services and the enthusiastic co-operation of everyone who influences members of the public—doctors, nurses, teachers, local government employees, youth leaders and so on—will be necessary if this problem of avoidable death is to be overcome. Towards achieving this aim the Committee arranged during the year a number of lectures to groups of doctors attending post-graduate courses; to nurses under training, and to nurses, health visitors and other local authority employees. All the nurses received a free copy of the Committee's handbook 'Helping to Cure Cancer' as do the many school-children who write to us for information in connection with project work. As founder members of the Local Co-ordinating Committee for Cervical Cytology, the Committee has also been active in bringing together and discussing common problems with many other workers active in the work of cytological screening for cancer of the uterine cervix. The Executive Officer of the Manchester Regional Committee on Cancer is a joint editor of the Co-ordinating Committee's Newsletter which is widely circulated throughout the region. Free supplies of leaflets and posters on cervical smears and on smoking were made available to the Health Department and to general practitioners locally.

The influence of professional people in educating those with whom they come into contact is profoundly important. But as well as our activities in this field, we also continued to offer our services in supplying speakers, free of charge, to voluntary groups, schools, and factories and offices. In all, 145 of such groups invited us along during the year.

The subject of cancer does not lend itself easily to mass media publicity and this should be treated with great care. However, the Committee was pleased to be consulted during the making of the Granada programme on smoking which featured the village of Longnor, and by the producer of the B.B.C.'s *Man Alive* programme on cancer. The Committee also collaborated in the providing of background for the tactfully-written series of articles which ran for a week in November in the *Manchester Evening News*. The Executive Officer also made three broadcasts on Radio Manchester, which has a growing audience throughout the region.

This report touches on a year of activity affecting the population of Manchester in which a good cross-section of professional life has been involved in bringing the more heartening facts about cancer to the general public. This kind of work is bringing results. Recent figures supplied by the Christie Hospital show that, quite apart from the effects of the cytology programme, the proportion of women seeking advice for cervical cancer at an early stage, for instance, has more than doubled in recent years. This is an encouraging sign that many years of sustained, co-operative effort are beginning to bear fruit, and should strengthen the determination of all of us involved to redouble our efforts".

Ambulance and Transport Service

There was an increase in the number of patients carried, 16,665 more patients being conveyed by the ambulance service than in the previous year, when industrial action taken by the ambulancemen in support of their pay claim resulted in a decrease. The number of patients conveyed by the hospital car service was 5,105 less than in the previous year.

Fifty-four two-stretcher ambulances and twenty-two one-stretcher dual-purpose vehicles were in service at the end of the year.

Operational record
Ambulance service

			1971		1970	
			<i>Stretcher cases</i>	<i>Sitting cases</i>	<i>Stretcher cases</i>	<i>Sitting cases</i>
Patients carried—						
accidents	..	..	24,908	—	23,235	—
general	..	..	15,143	271,810	12,452	259,488
others	..	..	963	674	881	777
			41,014	272,484	36,568	260,265
			313,498		296,833	
Total mileage—						
two-stretcher ambulances			810,177		786,563	
dual-purpose vehicles			350,268		332,924	
pool cars	..	..	2,533		2,547	
			1,162,978		1,122,034	

Hospital car service
Patients carried
Mileage

10,223	15,328
76,809	114,333

Train journeys

In appropriate cases the transport of patients by rail was arranged, with 896 cases carried, an increase of nine on the previous year.

Flying squad

The provision of ambulance transport for the emergency maternity flying squad and its equipment provided by St. Mary's Hospitals continued. The flying squad was conveyed by ambulance on 56 occasions and in 42 cases the patient subsequently was transferred to hospital in the same vehicle.

Staff

In 1970, the Management Service Section of the Town Clerk's Department commenced a study of the Ambulance Service in order to ascertain if a productivity agreement, as recommended by the National Joint Council for Local Authorities' Services (Manual Workers), would be practicable. This study continued during 1971 and agreement was reached on a productivity scheme affecting both the ambulancemen and the control staff.

The scheme for the ambulancemen was introduced in mid-December in a modified form, as it was not possible to implement the reorganized control scheme at the same time, and the results of introducing the scheme will be reported fully in the 1972 annual report.

The approved establishment of operational staff remained unchanged at 170, although a revised establishment has been recommended, and included 129 ambulancemen who have qualified for the Proficiency Certificate issued by the Ambulance Service Advisory Committee.

In-service training for new recruits continued and some members of the staff were seconded to the six-week qualifying courses held at the Cheshire and Lancashire Ambulance Service Training Schools.

A team was entered in the National Ambulance Competition, organized by the National Association of Ambulance Officers and was successful in winning the team test in the No. 1 region competition, held at Wigan in June, and thus qualified for the national finals. These took place at Harrogate in August and it is very pleasing to report that the Manchester team of Senior driver B. Shaw and ambulanceman R. Youill were successful in winning the team prize and received the Pearson trophy. In addition, the Manchester team was so ably supported by the Salford ambulanceman in the drivers competition and by the Cheshire County ambulanceman in the attendants competition that the No. 1 region were the overall winners of the Competition for which the Victor Ludorum in the form of the Pye Rose Bowl was presented.

The success of the Manchester team was particularly gratifying, as it was Manchester's first success in the Competition and, also, it was the first occasion on which No. 1 Region had emerged as overall winners.

All drivers employed in the Health Department on 1st January of each year are entered for the National Safe-Driving award organized by the Royal Society for the Prevention of Accidents. One hundred and twenty qualified for awards for 1970, including 109 ambulance drivers, and the presentation of the awards was made by the Chairman of the Health Committee Alderman J. Taylor at a function held in the Town Hall in October.

Hospital car service

Hospital car service volunteers recruited by the Women's Royal Voluntary Services continued to augment the ambulance service, particularly in the transport of walking cases to and from out-patient clinics and convalescent homes.

Municipal car pool

One limousine car and seven saloon cars were operated as a municipal car pool, being used by various committee members and officials and also to convey mental and other patients to hospital. These latter journeys are included in the ambulance service statistics. The operating mileage of 92,256 miles was 4,736 miles more than in 1970.

Commercial vehicles

Four vans operating full-time for the Health Department travelled 37,771 miles, of which 10,418 miles were incurred on disinfection service duties.

Disinfection and disinfestation service

A disinfection and disinfestation station is an integral part of the Monsall sub-depot, two steam disinfectors being available for clothing and bedding. In addition, a formalin chamber is used for articles which cannot be subjected to steam pressure. One of the commercial vehicles serves as a bedding van for the collection of infected bedding and clothing, and is designed to facilitate rapid disinfection of its interior.

Immunization unit

The mobile immunization unit continued to be used for children whose parents were unable to use the service provided at child welfare centres. The operating mileage was 7,744 miles, compared with 7,735 miles in 1970.

Operating mileage

The total mileage operated by all sections of the ambulance and transport service in 1971 was 1,298,216.

Nursing Homes and Agencies

The nursing homes in the City which have been exempt from registration under section 192 of the Public Health Act, 1936, have, since 15th May, 1964, been required to be registered with the appropriate local authority in accordance with The Conduct of Nursing Homes Regulations, 1963. During 1971 one registered nursing home for maternity patients was discontinued. Details of the seven nursing homes registered are as follows:

<i>Names, addresses and principal officers</i>	<i>Purpose of registration</i>
Manchester and Salford Methodist Mission, Lorna Lodge Maternity Home, 133 Barlow Moor Road, West Didsbury, Manchester, 20. (061-445 5219) (Matron—Miss C. Gott, S.R.N., S.C.M.)	5 maternity patients
The Manchester and District School for Jewish Handicapped Children, Laski House, Smedley Lane, Cheetham, Manchester 8. (061-205 1920) (Matron—Mrs. M. Rennie, R.M.N.)	15 mentally handicapped children
St. Joseph's Hospital, Carlton Road, Whalley Range, Manchester 16. (061-226 2231) (Superior and Matron—Sister Veronica, S.R.N., S.C.M., H.V. Certificate)	140 medical and surgical patients
Manchester Jewish Homes for the Aged, 208 Cheetham Hill Road, Manchester 8. (061-834 3892) (Administrative Director—H. Lewis Berg, B.A., LL.B., F.H.A.) (Sister-in-Charge—Mrs. M. Fitzgerald, S.R.N., S.M.N.)	100 medical patients
Stonecroft Recovery Home, Parkfield Road, Didsbury, Manchester 20. (061-445 2972) (Matron—Miss H. D. Lyon, S.R.N.)	12 convalescent patients
Philip Godlee Lodge, 842 Wilmslow Road, Didsbury, Manchester 20. (061-445 3183) (Matron—Miss H. A. Biddulph, S.R.N.)	46 elderly and infirm convalescent patients.
The Alexian Brothers' Nursing Home, 171 St. Mary's Road, Moston, Manchester 10. (061-681 1929) (Brother Superior Anthony, S.R.N.)	84 medical patients.

Inspections of the homes by a senior medical officer and a public health inspector have been carried out and advice has been available whenever required.

One new application for a nursing agency licence and three applications for the renewal of licences, as required by section 2 of the Nursing Agencies Act, 1957, were approved.

Medical and General Nursing Services, 1 B Cooper Street, Manchester 2.
Reed Nurse, Nursing Agency, 4 Market Street, Manchester 1.
Nurses Night and Day Limited, The Nursing Centre, 14 Piccadilly, Manchester, M1 3AW.
and
British Nursing Association, 255 Royal Exchange, Manchester, M2 7BT.

Residential Homes

Dr. Garrett Memorial Home

The Dr. Garrett Memorial Home, Conway, is ideally situated overlooking the sea and the estuary of the River Conway, and is an ideal setting for a children's convalescent home.

The accommodation consists of three large detached houses and a number of pre-fabricated buildings. One of the detached houses has, for many years, been entirely used for staff accommodation. The tendency in recent years is for staff to be non-resident. Accordingly, it was found possible during the year to increase the accommodation for children by fifteen beds. This was approved by the Health Committee in July, 1971, making accommodation available for a total of 101 children. The increased intake of children will commence on the 1st January, 1972, following the necessary increase in staff.

In February, there was an outbreak of sonne dysentery. Investigations showed that all the affected children were included in the latest arrivals from Manchester. Accordingly, it was decided that bacteriological examination of stools should be included in the medical examination of all children before admission to the Home. During the remainder of the year, there were no further outbreaks of sonne dysentery.

Admissions during the year averaged 20 children weekly. Children were referred for convalescence by the School Health Service, Maternity and Child Health Service and general practitioners.

Facilities for play have been extended. An adventure playground has been provided to cater for all ages and is very popular with the children. Play equipment includes swings, see-saws, parallel bars and a sand pit. A climbing frame shaped like a moon rocket was presented to Councillor Conquest, Chairman of the Residential Homes Sub-Committee, by the Conway Round Table. This gift is only one example of the increasing interest shown by the local residents in the Manchester children who come to convalesce in their midst. Other gifts were a pony and trap from the proprietors of Maenan Abbey Hotel, and toys and sweets from churches and local organisations.

Christmas parties for the children were given by the proprietors of the Erskine Hotel, Conway; the Washington Hostel, Llandudno; and the Conway Round Table and Ladies' Circle. A show was arranged by the International Brotherhood of Magicians during their conference in Llandudno. A fireworks display and party was provided by the Conway Round Table.

A group of children was invited to the R.A.F. Valley Station, since when a helicopter, at a pre-arranged time, frequently passes over the Home and acknowledges the salute of the expectant children. On one occasion, to the delight of the children, the helicopter landed in the playing field.

The weekly visits to Chester Zoo continued throughout the Summer. The arrangement was that the coach taking children home to Manchester at the end of their convalescent holiday, left a party of children at the zoo, collecting them approximately five hours later on the return journey to Conway.

These visits to Chester Zoo are greatly enjoyed by the children, many of whom have never previously had an opportunity of seeing wild animals.

During the summer months the children enjoyed picnics, beach parties and visits to places of interest. Children spending a winter holiday at Dr. Garrett also took part in visits and interesting walks and enjoyed a variety of indoor games and leisure pursuits.

The programme of in-service training continued. In 1970, five senior attendants obtained a certificate of attendance for the course in child care organised at the College of Further Education, Bangor. In 1971 a further four senior attendants were released to attend the course. It is intended that all the senior attendants and children's attendants will have an opportunity of participating in this course at Bangor, which is enabling the staff to provide a high standard of care for the children in their charge.

While in residence at Dr. Garrett, the health of the children is supervised by Dr. Tudor Owen, the visiting medical practitioner who pays regular visits and is always on hand for emergencies if requested by the Matron or her three nursing staff, at least one of whom is always on duty.

In May, the Lord Mayor and Lady Mayoress of Manchester and the Mayor and Mayoress of Conway visited Dr. Garrett Memorial Home.

Routine visits were made every four months by the Residential Homes Sub-Committee and monthly by the Health Department medical and administrative staff.

Nursing care required

Illness	Cases	
	1971	1970
Common infectious diseases	13	11
Sonne dysentery.. .. .	12	12
Tonsillitis (no organism isolated)	11	} 29
Tonsillitis (Group 'A' haemolytic streptococci isolated)	2	
Coughs and coryza	16	61
Dental abscess	2	—
Urinary infection.. .. .	1	—
Otitis media	1	2
Pyrexia—unknown origin	1	—
Asthma	2	1
Hysteria	1	—
Sprained ankle	2	—
Abdominal pain	2	—
All types	68	116

Two children were admitted to hospital for observation.

Resulting from throat swabbing on arrival for their period of convalescence, two children were found to be symptomless carriers of Group 'A' Haemolytic Streptococci and were isolated during their period of treatment.

Statistics of admissions and discharges and of nursing care required are given in the following tables:—

Admissions								
Type of case							1971 Number of cases	1970 Number of cases
Admissions							977	1,010
Re-admissions from hospitals							2	1
Totals							979	1,011

Discharges								
Type of case							1971 Number of cases	1970 Number of cases
"fit"							926	958
"improved"							59	41
"to hospital"							2	3
Totals							987	1,002

Municipal Hostels

Women: Ashton House, Corporation Street, Ancoats 193 beds
Manchester, M4 4DG.

Men: Walton House, Harrison Street, Ancoats, Man- 452 beds
chester, M4 7PF.

The municipal hostels provide cheap and clean accommodation for residents who wish to be independent and are prepared to cater for themselves. The facilities include the use of day rooms, a residents' kitchen for the preparation of food, a dining room, storage lockers, a laundry, toilet facilities, and night accommodation in small separate cubicles. In both hostels there is a shop where residents may buy a variety of food, groceries and other goods. Many of the commodities for sale can be bought in small quantities, just sufficient for one person for one meal. A cooked mid-day meal may be bought at Ashton House at low cost and at both hostels residents may purchase hot and cold snacks.

The inclusive charge is 35p per night (£2.20 per week) at Ashton House, or 40p per night (£2.40 per week) at Walton House. Residents are encouraged to book weekly, weekly bookings being accepted on any day of the week. The average number of beds occupied nightly was 110 at Ashton House and 385 at Walton House.

The hostels are intended for working men and women who are able to look after themselves without supervision. There is no free accommodation at the municipal hostels and residents are accepted at the discretion of the Manager or Assistant Managers, who may consult senior medical and nursing staff if in doubt about the suitability of any individual on account of physical illness or handicap, mental disturbance or social behaviour. Persons applying for admission directly from hospital through the medical social worker are always visited in hospital by the District Nursing Superintendent

or her Deputy to assess suitability for life in a hostel. Residents in the hostel who cause a disturbance through anti-social behaviour are asked to leave. Long-term residents who are no longer able to care for themselves are encouraged and assisted in obtaining admission to voluntary or statutory residential accommodation.

The District Nursing Superintendent and her Deputy continued their weekly medical/social advisory clinics at both hostels. They also supervised facilities for the control of infection at the hostels and, when necessary, carried out treatments prescribed by visiting medical practitioners.

The bed occupancy at both hostels remained high and indicates that there is a definite need for this type of accommodation in the City for persons who are unwilling or unable to find their own accommodation and yet who wish to remain independent.

The two municipal hostels were built about 70 years ago and proposals are in hand to modernise Walton House to bring it up to acceptable standards of today. As regards Ashton House, it is proposed to replace this hostel by a new purpose-built hostel for 125 residents.

Ashton house

During the year the number of young girls in residence continued to increase. Some of these were girls away from home for the first time. At Ashton House they have both independence and protection in an environment which is warm and friendly.

52 of the residents at Ashton House are in full-time employment. Many of these work in the hotel and catering industry. The low remuneration received by many of the residents highlights the need for this type of hostel in the City.

During the year 125 new food lockers were provided and installed in the residents' kitchen. Improved lighting and heating have added greatly to the comfort of the residents and minor structural alterations in the day rooms have provided much additional space.

In December, the staff and children of Chorlton Park Junior School invited the Ashton House residents to their school and entertained them with a musical concert. 60 of the residents accepted the invitation. The children presented each visitor with an individual gift and also sent gifts home to those who were unable to attend.

At Christmas time, High Walton Church Choir and the local Salvation Army Children's Choir visited the hostel and entertained the residents with carols and sacred music.

As in previous years, Ashton House and Walton House benefitted from the kindness and consideration of Mr. Wagstaffe, Headmaster of Shawbrook Special School, who delivered to each hostel a beautiful Christmas tree before the schools closed for the Christmas holidays. The Christmas trees were very greatly appreciated by the residents and staff at both hostels.

Walton house

The standard of self care at Walton House varies greatly. The younger working men often take their main meals at work and look after themselves

well at the hostel by catering in groups. Some of the older residents have drifted to Walton House following a bereavement in the family when they are left alone and are unable to cope in their homes. Much too often these men care for themselves in a very haphazard and unsatisfactory manner. They spend their money unwisely and have little left for food. They are apathetic and quite unsuitable for hostel life and yet resist any suggestion to apply for accommodation in a residential home. Similarly, Walton House is home for a considerable number of younger men who are not working but who seem to have lost all contact with their family and friends. Then there is a considerable number of casual visitors who wander from place to place, sometimes living rough. A proportion of these are infested with vermin which is soon detected by the bed makers. Facilities for disinfestation are provided in Walton House by visiting Health Department staff and refusal to accept disinfestation means leaving the hostel. Anti-social behaviour such as nocturnal enuresis is a fairly common occurrence and often is the result of over indulgence in alcohol.

Recurring bed-wetting also means non-acceptance at Walton House.

Unlike the residents at Ashton House who take a considerable pride in their hostel, the men living at Walton House lack community spirit and do nothing to keep their sleeping or living accommodation clean and tidy. Receptacles for waste paper and other debris are often ignored or simply disappear and efforts to improve the facilities in Walton House have so far received minimal support from the majority of residents.

Even men who have stayed at Walton House for many years show little interest in future developments as they cannot guarantee that they themselves will enjoy the benefits.

ENVIRONMENTAL HEALTH SERVICES

Introduction

Chief Public Health Inspector,

E. W. FOSKETT, B.Sc. (Econ), D.P.A., M.A.P.H.I., M.R.S.H.

Housing

The housing activities of the department were again at a new high peak. As in previous years the most important aspect was the work in dealing with City Council's clearance area policy. Over 7,000 houses were inspected during the year and of these over 5,800 were represented by the Medical Officer of Health as being unfit. This number is somewhat less than the total of the previous year but leaves only about 5,400 houses remaining in the current programme.

Slum clearance was not, however, the only major activity in this field of work. The number of Public Inquiries which the department serviced was the highest ever recorded. Thirty-three inquiries were held and these covered no fewer than 9,000 houses and the owners of almost 3,000 raised objections and each of these houses was re-inspected by the department's staff. Additionally, the department undertook, as part of the work required for the Corporation's housing policy, a special review of the housing stock in the City. This formed phase 1 of the reviews required by the Housing Act, 1969, which the department is carrying out. These surveys are of considerable importance and have a marked impact upon the Corporation's housing policy.

The number of applications received for improvement grants was again higher than the previous years' and there has now been a marked change in the pattern which is emerging. Formerly, the standard grant application was predominant and now while still numerically the largest class of application they are gradually reducing in number, being replaced by applications for improvement grants. Especially noteworthy during the year has been the increase in the amount of grant paid in connection with the conversion of single houses to houses with multiple self-contained dwellings.

During the year the department felt the full impact of applications for qualification certificates. Over 2,500 surveys were made in detail of properties for which application for certificates had been made. It was disturbing to find the relatively low level of maintenance in these houses.

At the end of the year plans were in hand for the execution of a sample house condition survey and an advantage was to be taken of this also to

conduct a sample overcrowding survey, as the department has no up-to-date information on this topic.

Clean air

The shortage of solid smokeless fuels, which developed in the autumn of 1970, resulted in the temporary suspension of all the smoke control orders made before 1963 and covered the areas where the principal fuel was gas coke.

Domestic premises were affected, very many of them Council owned. Because the winter was exceptionally mild no fuel crisis as a whole developed, although some solid fuel users had difficulty in securing their fuel of choice. After all the effort put into creating these smoke control areas and their subsequent supervision, it was disappointing to see the principle of clean air breached in this way. Inevitably, damage was done which will be hard to eradicate. The sale of coal in these areas will not be easy to stop and the price differential encourages the clandestine use of smokey fuels. Between the making of the orders and their suspension it had not been necessary to take legal action against coal users and suppliers in these areas, but at the end of the year one case had been heard, and three cases were awaiting hearing and there were prospects of several more as fuel merchants failed to observe the re-imposed controls.

In announcing a much improved solid smokeless fuel position in July through Circular 53/71, the Department of the Environment invited local authorities to resume smoke control activities and to review programmes with a view to accelerating them. Proposals for a programme to make the final smoke control order three years after assignment of financial priority by the City Council was approved by the Health Committee. The achievement of such a target is possible, but it presupposes the removal of former causes of delay and a very great effort by the department. At this point it should be emphasised that the creation of smoke control areas is only part of the work performed in combatting atmospheric pollution and that when the whole City is covered by operated smoke control orders there will be still an important role to fulfil. As part of the smoke control programme the extension of air pollution measurement is being pressed forward and three new volumetric stations should be operational in 1972.

Caravan site

In the annual report of 1970 the construction of the Corporation's gypsy caravan site was foreshadowed. The mild winter enabled work to be completed almost on time and the site was handed over by the contractors in June, when an opening ceremony was performed by the Chairman of the Health Committee (Alderman Dr. J. Taylor J.P.) A full description of the site will be found on page 114 together with a plan and photograph.

After all the clamour for the site it was a little surprising that on the opening day only three of the pitches were occupied. Some gypsies were out of the area engaged in agricultural work, but there were a considerable number of gypsy families within the City occupying unauthorised sites. Although the number of lettings gradually increased, it was several months before the site was fully occupied, but the average occupancy rate in the last quarter was 80. per cent

At the end of the year the City Council had an application with the Department of the Environment for a designation order under section 12 of the Caravan Sites Act, 1968.

Disposal of the dead

Because of the risk of infection the public health service has had for a long time an interest in the disposal of the dead. During the year the department supervised the export of four bodies to overseas destinations and members of the public health inspectorate were present when no less than 3,434 human remains were exhumed. Of these 12 were from cemeteries in current use, but 3,422 were of bodies interred many years ago in a Poor Law burial ground. The reason for the exhumation was the need to use the land for road works. The work was carried out by the Parks Department staff.

Infectious diseases

The post-war changes in the incidence of infectious disease have sometimes induced a sense that the investigation of infectious disease and the surveillance of contacts has lost much of its importance. Events of 1971 brought the reminder that infectious disease can still be a major problem. The outbreak of diphtheria in February was most serious and big demands were made on the staff in tracing contacts. In the summer, holiday makers returned from areas where there had been cholera cases and these had to be visited daily during the remainder of their possible incubation period. Fortunately, the City had only contacts but no cases. In the late autumn the department was involved in the sampling and contact supervision needed to deal with a stubborn outbreak of Flexner dysentery in a special school for mentally handicapped children.

Manchester Corporation (General Powers) Act, 1971

Elsewhere in this report will be found a more detailed account of the environmental health powers obtained in the Manchester Corporation (General Powers) Act, 1971. Here comment is made on only two points. The Corporation was successful in securing powers to require the speedy closing of food premises where serious contraventions of Food Hygiene Regulations are found. These powers, at the time of writing, are unique although other local authorities are believed to be attempting to incorporate similar powers into their own private Acts. These powers to close insanitary food premises will be valuable in the campaign for cleaner, safer food, although it is hoped that there will be no necessity for their frequent use.

The second point relates to powers which Parliament declined to give to the Corporation. Over a period of time the department has become aware of a development in the food trade which consisted of the cleaning and re-labelling of cans of food. The food is acquired from many sources, such as bankrupt stock, salvaged goods from accidents, and goods rejected by manufacturers because of faulty processing or of a compositional failing. The trade has economic justification, for much of the material enters the trade not because it is unfit but because it fails to meet reputable manufacturers' own high standards for goods sold under their own brand names. However, the experience of the department showed that from time to time old, badly processed or contaminated food re-entered the trade in this way.

Accordingly, the Corporation sought powers to control this trade from any premises in Manchester. Although the required form of control was denied, the department clearly directed attention to a practice requiring further investigation.

The future of Environmental Health

In November, 1971, the Department of the Environment published in Circular 84/71 the Government's proposals for the re-organisation of Local Government in England and indicated the proposed allocations of functions. The earlier fears that environmental health functions would be divided between the different tiers of authorities largely proved to be groundless. Basically, environmental health work is to be carried out at district or metropolitan district council level and this change of view will be welcomed. Environmental health is mainly a local matter and will, thus, continue to be controlled by local councils. The main exception will be the probable transfer to the upper tier of responsibilities relating to food standards and labelling. The responsibility for the inspection and safety of food and for food hygiene will remain with district councils. This division of responsibility, which will pose some difficulties in administration, seems very hard to justify, especially, in the case of major authorities such as Manchester. While environmental health may be a matter for local action there are some aspects which could be improved by planning over larger areas. Food and drugs sampling is clearly such a case, as is also atmospheric pollution, but while there may be a valid argument for planned co-operation and co-ordination there seems to be less validity for the transfer of even food and drugs administration to an upper tier and, perhaps, to a body not actuated by motives of health protection.

Divisional organisation and staffing

1971 saw the implementation of the second stage of re-organisation in the division. After delays a new establishment was approved for the administrative staff which has improved some salary grades and career prospects, but the delay in implementation and rapid change in circumstances only served to make the establishment inadequate almost at once. Last year's comment is repeated. There is a strict limit to the expansion of services and absorption of new functions with which the staff can be expected to cope, and more staff of the right calibre needs to be recruited. Few will mourn the passing of the "Sanitary Services" designation and many will think that "Environmental Health Services" is a more appropriate title. Nevertheless, the work remains much the same although it changes to meet new situations and develops to use new knowledge. A major attribute of the public health inspectorate is its flexibility and this characteristic enabled the department to direct resources to meet changed need. During the year the establishment was again not fully met although levels were higher than in recent years. The inability to fill the vacant posts reflected the general shortage of public health inspectors and advertising produced little response although, as in years past, experienced inspectors were recruited through their own approach to the department.

In the course of the year three members of the administrative and clerical staff left and five new members joined. Several members were promoted and one retired.

As far as the public health inspectorate is concerned three inspectors retired. One of these was Mr. Stanley Davies who was principal public

health inspector responsible for default works and disinfestation. Mr. Davies gave 23 years of conscientious service to the authority and his services were much appreciated. Six inspectors left to join other authorities and six joined the staff from other authorities or employment.

Eight student public health inspectors qualified by passing the Diploma examination of the Public Health Inspectors Education Board and were appointed to the staff. One of these was the first graduate in environmental sciences to be appointed to the staff after successfully completing a post graduate year of training. In completing the intake of student public health inspectors there were appointed two other graduate trainees, both ladies, and three other students with degrees or the equivalent were appointed as students. One public health inspector was accepted as a part-time student at Salford University for the M.Sc course in health physics; another passed the examination for the D.M.A. Two inspectors passed the Diploma in Air Pollution Control examination of the R.S.H.

Inspections and Visits

Water

To obtain samples of water for chemical and bacteriological examination	43
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Food supply

Restaurants and snack bars	1,135
Factory canteens	208
Bakehouses	217
Food preparation premises	554
Markets—sale of food	163
Shops—sale of food	1,620
Hawkers of food and storage premises	230
Dairies, milk shops and delivery vehicles for milk samples ..	543
Premises and vehicles used for the sale of ice cream	71
Shops, markets, etc.—sampling	612
Dairies and milk distribution premises	95
Premises used for the manufacture of ice cream	96
Food delivery vans	295
Poultry slaughter and dressing premises	44

Smoke prevention

Works, etc.	3,394
Premises—survey for smoke control areas	26,670

Housing conditions

Primary inspections of dwelling-houses (Public Health Act, 1936, Housing Act, 1957, etc.)	16,649
Subsequent inspections of dwelling-houses	15,541
Rehousing—medical cases	1,677
Applications for improvement grants, qualification certificates	3,463
Caravan dwelling	294
Canal boats	35
Supervision of work in default	5,845
Houses in multiple occupation	7,773

Occupational conditions

Factories	744
Shops—Shops Acts, 1950 to 1965	5,138
Other business premises	375
Offices, Shops and Railway Premises Act, 1963	5,449

Infectious diseases

Primary visits after notification	1,039
Subsequent visits including contacts	3,460
Food poisoning	704

General environmental conditions

Hotels, beerhouses and licensed clubs	1,012
Burial grounds, exhumations, etc.	27
Cesspools, pailclosets, etc.	186
Effluvium nuisances	486
Establishments for massage or special treatment	66
Hairdressers' and barbers' shops (Manchester Corporation Act, 1950)	221
Hospitals, nursing homes, agencies and nurseries	217
Land, refuse deposits, etc.	1,097
Noise	467
Offensive trades	73
Premises for the purpose of examination of drains	286
Piggeries	11
Rodent infestations—primary visits	7,353
Refuse tips	29
Sanitary accommodation, etc., at schools, churches	456
Securing of unoccupied buildings	377
Streets, passages, roadways and footpaths	1,020
Swimming baths	95
Verminous premises	265
Watercourses	51
Miscellaneous	9,819

Water Supply

The City's principal sources of water supply are provided by the impounding reservoirs of Thirlmere and Haweswater in the Lake District, and to a lesser extent the gathering grounds in the Longdendale Valley, on the Cheshire—Derbyshire border. Distribution of the supply is by trunk mains and service reservoirs with booster stations maintaining the pressure in the higher level districts.

Extensive sampling and examination of the water supplies was carried out by the Waterworks Department laboratory. In addition, public health inspectors obtained 28 samples for chemical and 36 for bacteriological examination from dwelling houses, business premises, canteens, hospitals and day nurseries. Of these, ten samples were taken from a hospital possessing its own private reservoir of 300,000 gallons capacity, and all samples were found to contain coliform organisms. The further investigation of this supply revealed that the manholes on the reservoir roof were overgrown and seemed to permit access of insects and debris and, as there was virtually no storage capacity on the downstream side of the pumps, when repairs and replacements were carried out they had to be put into service without sterilisation. This investigation was pursued by the Waterworks Department, and the hospital authorities were advised.

Fourteen complaints of the quality of water supplies to particular premises were received, ten were concerned with discolouration, three with taste, and one with animalcules. The complaint concerning animalcules was substantiated, and those concerned with waste and discolouration were caused by the disturbance of mains detritus during maintenance and repair work.

The Engineer and Manager of the Manchester Corporation Waterworks Department was informed of all complaints and of the results of all chemical and bacteriological examinations.

The reports of the Public Health Laboratory on the bacteriological examination of the samples are summarised in the following statement:—

District	No. of samples	Samples free from coliform bacteria	Faecal coli found		Non-faecal coli found		Service reservoir	Source
			No. of samples	No. per 100 mls.	No. of samples	No. per 100 mls.		
Baguley ..	2	2	—	—	—	—	Dunham Reservoir or Woodgate Hill	Thirlmere/Haweswater
Blackley ..	2	2	—	—	—	—	Woodgate Hill	Haweswater
Burnage ..	1	1	—	—	—	—	Audenshaw or Denton	Denton
Cheetham ..	1	1	—	—	—	—	Heaton Park	Heaton Park
Crumpsall ..	1	1	—	—	—	—	Heaton Park	Heaton Park
Fallowfield ..	2	2	—	—	—	—	Audenshaw or Denton	Denton
Gorton ..	2	2	—	—	—	—	Audenshaw or Denton	Denton
Longsight ..	2	1	—	—	1	1	Audenshaw or Denton	Denton
Moston ..	4	4	—	—	—	—	Woodgate Hill	Haweswater
New Cross ..	2	2	—	—	—	—	Audenshaw or Denton	Denton
Newton Heath	2	2	—	—	—	—	Godley	Godley
Northenden ..	2	2	—	—	—	—	Dunham Reservoir or Woodgate Hill	Thirlmere/Haweswater
West Gorton ..	1	1	—	—	—	—	Audenshaw or Denton	Denton
Woodhouse Park	2	2	—	—	—	—	Dunham Reservoir or Woodgate Hill	Thirlmere/Haweswater

In all instances the water was chlorinated.

The Engineer and Manager of the Manchester Corporation Waterworks Department supplied the following information concerning Manchester's water supply:—

Summary of laboratory results

Chemical

Thirlmere and Haweswater

At present only slight variations occur in the chemical analyses throughout the year and the results below may be regarded as typical :—

	<i>Thirlmere</i>	<i>Haweswater</i>
pH	7.6	6.5
Colour	10	12
Turbidity as ppm. silica scale	0.4	0.5
	<i>(parts per million)</i>	
Free acidity as CO ₂	2	2
Total alkalinity as CaCO ₃	4	18
Total hardness as CaCO ₃	11	18
Chlorides as Cl	7	8
Nitrates as N	0.04	0.01
Nitrites as N	nil	nil
Total ammonia as N	0.02	0.07
Oxygen absorbed from KMnO ₄ , 4 hours at 27°C	0.8	1.2
Silica as SiO ₂	3	2
Iron as Fe	0.05	0.10
Manganese as Mn	nil	<0.10
Fluorides as F	<0.10	<0.10

The water leaving Thirlmere is treated with lime for pH control and is chlorinated at the straining well. Re-chlorination is carried out after the Middlebrook Strainers prior to distribution.

The Haweswater water is strained and chlorinated at Garnett Bridge and it is re-chlorinated and limed at Woodgate Hill before distribution.

Both waters are non-plumbosolvent.

Thirlmere and Haweswater distributed supplies

Frequent samples are taken throughout the distribution system and an analysis of the mixed Thirlmere/Haweswater supply taken from a consumers' tap was as follows :—

pH	8.1
Colour as ppm. platinum	9
Turbidity as ppm. silica scale	0.9
	<i>(parts per million)</i>
Free acidity as CO ₂	nil
Total alkalinity as CaCO ₃	17
Total hardness as CaCO ₃	23
Chlorides as Cl	9
Nitrates as N	nil
Nitrites as N	nil
Total ammonia as N	0.02
Oxygen absorbed from KMnO ₄ , 4 hours at 27°C	0.7
Silica as SiO ₂	2
Iron as Fe	0.04
Manganese as Mn	<0.01
Fluorides as F	—

Longdendale Water—raw water inlet to Arnfield treatment plant

As with Lake District waters, this water is subject to only very slight seasonal variations. And the results which follow are typical of the water arriving at the treatment plant:—

pH	..	..	..	..	..	..	..	5.2
Colour as ppm. platinum	..	..	..	..	..	..	..	29
Turbidity as ppm. silica scale	..	..	..	..	..	..	..	8.1
								(parts per million)
Free acidity as CO ₂	..	..	..	..	..	..	..	4
Total alkalinity as CaCO ₃	..	..	..	..	..	..	..	7
Total hardness as CaCO ₃	..	..	..	..	..	..	..	28
Chlorides as Cl	..	..	..	..	..	..	..	12
Nitrates as N	..	..	..	..	..	..	..	nil
Nitrites as N	..	..	..	..	..	..	..	nil
Total ammonia as N	..	..	..	..	..	..	..	0.06
Oxygen absorbed from KMnO ₄ , 4 hours at 27°C	..	..	..	..	..	..	..	1.5
Iron as Fe	..	..	..	..	..	..	..	0.35
Manganese as Mn	..	..	..	..	..	..	..	0.06
Fluorides as F	..	..	..	..	..	..	..	nil

This manganese bearing water also has a high colour and full chemical treatment, involving chemical coagulation, sedimentation, filtration, pH correction and disinfection, is necessary. The results below were obtained from a house tap sample on this supply.

pH	..	..	..	..	..	..	..	8.5
Colour as ppm. platinum	..	..	..	..	..	..	..	3
Turbidity as ppm. silica scale	..	..	..	..	..	..	..	0.4
								(parts per million)
Free acidity as CO ₂	..	..	..	..	..	..	..	nil
Total alkalinity as CaCO ₃	..	..	..	..	..	..	..	9
Total hardness as CaCO ₃	..	..	..	..	..	..	..	45
Chlorides as Cl	..	..	..	..	..	..	..	18
Nitrates as N	..	..	..	..	..	..	..	nil
Nitrites as N	..	..	..	..	..	..	..	nil
Oxygen absorbed from KMnO ₄ , 4 hours at 27°C	..	..	..	..	..	..	..	0.6
Silica as SiO ₂	..	..	..	..	..	..	..	7
Iron as Fe	..	..	..	..	..	..	..	0.06
Manganese as Mn	..	..	..	..	..	..	..	<0.01
Fluorides as F	..	..	..	..	..	..	..	nil

Bacteriological summary

The three group headings of the bacteriological samples are : (i) raw waters, (ii) treated and partially treated waters prior to distribution and (iii) distributed chlorinated supplies. The final group includes water leaving the treatment plants and consumers' premises.

Source	Total number of samples	Samples free from coliform organisms	Faecal coli present		Non-Faecal coli present	
			No. of samples	Count per 100 mls	No. of samples	Count per 100 mls
Raw Waters ..	309	—	in most cases, presumptive coliform tests only were made.			
Treated and partially treated waters ..	663	629	7	2,3	11	1—3
Distributed water ..	3953	3536	77	1—6	366	1—18+

All waters have been continuously chlorinated throughout the year. Aftergrowths of coliform bacteria have occurred on mains deposits and some samples of water, taken after mains disturbances, have given small coliform counts.

Plumbosolvency

All waters are dosed with lime for pH correction to reduce the possibility of lead uptake in supply. Results obtained during the year have all shown lead values well below the W.H.O. standards.

Radioactivity

Rainfall samples are collected over a period of 14–15 days, the containers being changed on the 1st and 15th of each month. Weekly samples are also taken of Longdendale and Haweswater waters.

The results present the gross beta activity expressed as "picocuries per litre of Strontium 90/Yttrium 90".

Source	Period	Radioactivity as pCi/1 Range	Weighted mean
Rainfall	1st Quarter	17.69 to 324.96	71.6
	2nd Quarter	21.82 to 304.71	90.1
	3rd Quarter	36.62 to 350.90	63.9
	4th Quarter	11.61 to 90.49	32.1
Longdendale raw water	1st Quarter	1.00 to 4.85	2.0
	2nd Quarter	1.37 to 9.78	5.3
	3rd Quarter	2.55 to 7.90	5.7
	4th Quarter	1.85 to 6.02	4.0
Longdendale final water	1st Quarter	1.00 to 3.95	1.5
	2nd Quarter	1.00 to 5.15	2.3
	3rd Quarter	1.68 to 4.22	3.2
	4th Quarter	1.22 to 5.74	3.3
Haweswater	1st Quarter	1.00 to 5.12	2.3
	2nd Quarter	1.00 to 4.92	2.1
	3rd Quarter	1.00 to 14.40	6.6
	4th Quarter	1.00 to 5.84	3.7

Rainfall for the above quarters at Denton measured, 137, 141, 150, and 84 mms. respectively.

Action taken in Respect of any Form of Contamination

Should contamination occur in the distribution system, flushing, swabbing and, if necessary, re-sterilisation of the main are carried out. Bacteriological samples are taken and the main is not put back into service until satisfactory results have been obtained.

Food Supply

One new statutory instrument dealing with the composition and labelling of food has been placed on the statute book during the year.

The Preservatives in Food (Amendment) Regulations, 1971, which were made on 25th May, 1971, and came into operation on the 1st September, 1971, amend the principal regulations by imposing limits on the amounts of sodium nitrate and nitrite which may be added to bacon, ham and all pickled meat.

Hygiene

The Food Hygiene (General) Regulations, 1970, and the Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations, 1966, are the principle instruments for enforcing good food hygiene practice.

There are about 6,800 premises in the City subject to the regulations and health inspectors found at 1,467 of them some failure to observe the requirements, including 164 where unclean conditions predominated mainly in restaurant kitchens.

Four hundred and twenty-two food delivery vehicles, hawkers' barrows, premises and market stalls were inspected and at 255 of these, contraventions of the regulations were reported.

Minor irregularities were dealt with informally and, generally, were promptly remedied, but in connection with 312 infringements of the regulations it was necessary to send cautionary letters. There were eight prosecutions, with fines and costs totalling £202.

Food poisoning

The number of food poisoning incidents notified and/or ascertained was 110, and investigations revealed that 243 cases were involved. In addition, 56 symptomless excretors, the majority of whom were associated with the cases, were discovered. The organisms responsible were identified in 221 cases as the following table illustrates, together with the foods implicated, where ascertainable :—

Number of cases	Organism	Foods implicated
100	<i>Clostridium welchii</i>	46—Blancmange. 36—Cold roast beef. 18—Cold rolled brisket.
54	<i>Salmonella typhimurium</i>	9—Foods eaten on foreign holiday. 6—Chicken. 3—Chicken or lamb. 36—Not ascertainable.
22	<i>Not identified</i>	1—Foods eaten on foreign holiday. 21—Not ascertainable.
11	<i>Salmonella agona</i>	4—Roast pork. 7—Not ascertainable.
10	<i>Salmonella indiana</i>	6—Cold roast beef. 4—Not ascertainable.
6	<i>Salmonella heidelberg</i>	1—Foods eaten on foreign holiday. 5—Not ascertainable.
6	<i>Salmonella st. paul</i>	2—Curried meat. 1—Probably tongue sandwich.
5	<i>Salmonella panama</i>	1—Foods eaten on foreign holiday. 1—Foods eaten on foreign holiday.
4	<i>Salmonella infantis</i>	4—Not ascertainable. 1—Foods eaten on foreign holiday.
3	<i>Salmonella anatum</i>	3—Not ascertainable. 1—Foods eaten on foreign holiday.
3	<i>Salmonella enteritidis</i>	2—Not ascertainable. 1—Foods eaten on foreign holiday.
2	<i>Salmonella bredeney</i>	2—Not ascertainable. 1—Foods eaten on foreign holiday.
2	<i>Salmonella dublin</i>	1—Not ascertainable.
2	<i>Salmonella livingstone</i>	2—Not ascertainable.
2	<i>Salmonella montevideo</i>	2—Not ascertainable.
2	<i>Salmonella virchow</i>	2—Foods eaten on foreign holiday. 2—Not ascertainable.
1	<i>Salmonella braenderup</i>	1—Foods eaten on foreign holiday.
1	<i>Salmonella brandenberg</i>	1—Probably minced meat.
1	<i>Salmonella derby</i>	1—Not ascertainable.
1	<i>Salmonella duisberg</i>	1—Not ascertainable.
1	<i>Salmonella haardt</i>	1—Foods eaten on foreign holiday.
1	<i>Salmonella havana</i>	1—Foods eaten in foreign country.
1	<i>Salmonella java</i>	1—Not ascertainable.
1	<i>Salmonella larochele</i>	1—Not ascertainable.
1	<i>Salmonella group B</i>	1—Foods eaten on foreign holiday.

Of the 110 incidents, there were six general outbreaks involving 117 persons, 13 family outbreaks involving 35 persons, and 91 sporadic cases. Twenty-three cases, 9·5 per cent of the total cases, were attributed to foods eaten whilst holidaying in foreign countries. Summaries of the six general outbreaks are as follows:—

Following a report that a chicken meal eaten at a Chinese restaurant had caused diarrhoea and vomiting in two people, an investigation revealed that four members of the restaurant staff were symptomless excretors of *Salmonella typhimurium*, and this organism was also demonstrated in samples of raw and cooked chicken, in pieces of cooked beef, and in swabs taken from a chopping block and from a table in the restaurant kitchen. Because of this widespread infection, the proprietor agreed to close the premises and not to reopen until the kitchen had been thoroughly cleansed and disinfected, and further investigation had been carried out. All cooked meats and some raw meats were surrendered for destruction, and the four symptomless excretors were excluded from food handling until three successive negative specimens had been submitted. Following the cleansing and disinfection of the premises, 14 swabs taken from working surfaces, utensils and equipment, and five specimens of uncooked foods were submitted for bacteriological examination; all proved to be negative. Attempts were made to discover the source of the infection, but investigations at three wholesale premises from which chickens, beef and pork were supplied were negative.

The restaurant premises were kept in a reasonably clean condition, but the infection resulted from a breakdown in food hygiene insofar as the same surfaces, equipment and utensils were used for raw and cooked meats, and raw and cooked meats were stored in the same refrigerators.

Approximately 3,000 meals per week were sold at the restaurant and, although there can be little doubt that many people were affected, only six cases and five symptomless excretors directly associated with this restaurant were discovered.

Four cases and six symptomless excretors of *Salmonella agona* organisms were discovered as a result of routine faeces specimens being taken following an ECHO 15 virus infection in a residential unit for mentally handicapped children some three months previously, since which time diarrhoea had fluctuated in incidence. There was no explosive illness to suggest an onset date for this outbreak, and the first case had a history of diarrhoea extending over several months. The faeces specimen from which the *Salmonellae* organisms were isolated was a routine specimen, and one of many sent in for this child who had suffered from the ECHO 15 virus infection.

Because of these routine specimens, it was established that the infection had occurred within a five day period. During this time, only one roast (an 11 lb. piece of pork) had been cooked, the remains of which had been used for sandwiches later on the same day. The same midday meals were eaten by 127 children and numerous staff of the adjoining junior training centre for handicapped children from whom no *Salmonellae* isolations were made. It was assumed, therefore, that the infection was caused by a meal other than the midday meal, and

cold meat sandwiches seemed most probable, especially as the 11 lb. joint had been cooked in one piece.

Two cases of *Salmonella indiana* infection, which occurred in a neighbouring authority, had eaten amongst other foods, roast beef bought from a Manchester shop and supplied by a firm of meat processors provisioning many shops in Lancashire. No associated cases had occurred in Manchester and, on enquiry, the Public Health Laboratory reported that 14 cases of *Salmonella indiana* infection had been notified from various local authorities in South-East Lancashire.

Although only the original cases had any apparent connection with roast beef, it was thought prudent to investigate the factory where the beef was processed. No illness had occurred amongst the staff, but faeces specimens requested from 11 people connected with the cooked meat revealed two symptomless excretors of *Salmonella indiana* organisms, and a swab from a cooked meat tray was also found to be positive. Raw and cooked meats specimens were negative. All cooked meat trays were destroyed and replaced by new ones, but *Salmonella indiana* organisms were again found in a swab from a cooked meat tray, and swabs from a raw meat scale pan and a soaking trough were reported to be positive for *Salmonella typhimurium*.

Advice was given on methods of sterilisation and on the storage of raw and cooked meats, and all equipment in the cooked meat section was sterilised, but again on two subsequent occasions *Salmonella indiana* organisms were demonstrated in swabs from the cooked meat trays. Cleansing and sterilisation of all equipment was again carried out, and environmental swabs taken on five subsequent occasions were negative.

Enquiries were addressed to 28 local authorities, in whose areas cooked meats from this factory were sold, as to any cases of *Salmonella indiana* infection which had occurred in their areas and were associated with eating roast beef. The result of these enquiries revealed that 19 cases and six symptomless excretors of *Salmonella indiana* organisms had occurred, and 18 of the cases had onset dates within the relevant period of time, but only six of these and the two symptomless employees could be directly connected with the food factory.

In addition, *Salmonella liverpool* organisms were isolated from a director of the food factory, who had no history of illness, and *Salmonella agona* organisms and an unnamed *Salmonella* organism were isolated from a sewer swab at the factory.

Clostridium welchii organisms were responsible for an outbreak of nausea and diarrhoea in an Old People's Home, where 18 out of 75 patients and staff were affected. The illness was of a mild character and persisted for about 12 hours. This occurred approximately 12 hours after eating a meal of cold boiled brisket, potatoes, beetroot, steamed pudding and custard. Nine of the faecal specimens submitted to the Public Health Laboratory were reported to contain *Clostridium welchii* organisms, but environmental swabs and a sample of roast beef were negative. None of the cold boiled brisket was available for testing, but this had been cooked the day before and allowed to cool at kitchen temperature before refrigeration. The weather at this period was very warm, the ambient temperature being around 70°F.

Thirty-two of 214 people who had eaten a school meal were affected with stomach pains and/or diarrhoea during the early hours of the next day. The illnesses were mild and of short duration, extending up to 24 hours. Investigations revealed that the meal, cold roast beef, potatoes, vegetable salad, apple tart and custard, had been prepared in a central kitchen from which ten schools had been provided with 1,134 similar meals. No illnesses were reported from the other nine schools and none of the kitchen staff had been affected.

The beef, in 7–8 lb. pieces, had been cooked in steam ovens, cooled on trays in the kitchen for 3½ hours, refrigerated until the following morning, when it was sliced and packed into covered containers and then into insulated containers for dispatch to the schools. The custard was prepared on the day of the meal from fresh and dried milk, custard powder and sugar, being run off into insulated containers by 10 a.m. ready for delivery to the various schools.

Ten environmental swabs, a specimen meal from the central kitchen, and faeces specimens from the kitchen staff, were submitted to the Public Health Laboratory for bacteriological examination with negative results. Five of 18 faeces specimens from affected persons, submitted for bacteriological examination were found to contain *Clostridium welchii* organisms.

Clostridium welchii infection, emanating from a small central kitchen supplying three schools with lunches, was responsible for an outbreak of diarrhoea affecting 46 persons out of the 763 who had eaten the meal. This outbreak was of so mild a character that many of the affected persons were not absent from school, and there can be no doubt that many more children were affected without the authorities being aware of it. It was of interest to note that *Clostridium welchii* organisms, which are usually associated with meat dishes, were isolated from the blancmange which formed part of the meal responsible for the outbreak. All the other ingredients of the meal were bacteriologically negative. Apart from the blancmange, which was never properly cooled, the preparation of the meal was satisfactory.

The blancmange was made in a water jacketed boiler from fresh and reconstituted milk, which was boiled before cornflour, food colour and sugar were added. It was again boiled to thicken the mixture, after which cold water was run through the water jacket to cool it. The skin was then removed from the top, and the whole mixture stirred before being placed in insulated containers, in a luke-warm condition. It was described as being "runny" when served. The boiler used was in daily use for the preparation of milk puddings and custards. The pan was made of aluminium alloy and the surface was badly scarified; there were numerous small patches of caramelised milk adhering to the surface. *Clostridium welchii* organisms were isolated from an enrichment culture of a swab taken from the boiler surface.

Twenty-four specimens of faeces were submitted for bacteriological examination, and *Clostridium welchii* organisms were isolated from 15 affected persons and from five members of the kitchen staff who had not exhibited any symptoms. Further evidence implicating the blancmange was that three affected persons had only eaten blancmange and jelly.

These outbreaks amply illustrate the fact that FOOD POISONING IS THE END RESULT OF BAD FOOD HYGIENE PRACTICES which in the above cases were as follows:—

Use of the same working surfaces, utensils and implements for raw and cooked meats.

The storage of raw and cooked meats in close proximity to each other.

The handling of raw and then cooked meats by the same person without hand-washing and change of overalls.

The cooking of meat in large joints.

The inadequate methods used for the rapid cooling of cooked meats.

The inadequate cooling of milk products before placing in insulated containers.

The inadequate cleansing of working surfaces and equipment.

In addition, 19 contacts of food poisoning cases occurring in other areas were investigated; all were negative for *Salmonellae* organisms but two persons who had attended a wedding reception were found to be excreting *Clostridium welchii* organisms. Four cases of *Salmonella* organism infections (reported by other authorities) who had taken up residence in Manchester were kept under observation until negative specimens were obtained.

Two cases of *Salmonella typhimurium* infection in another authority had had a meal in a Manchester restaurant. No illnesses associated with the restaurant had been notified, but ten faeces specimens from the staff were submitted for bacteriological examination, and two were discovered to be symptomless excretors of *Salmonella agona* organisms. Ten food samples and seven environmental swabs were reported by the Public Health Laboratory to be negative.

A confectioner received a notification from a "doctor on the Public Health staff" that his cheese cakes had caused mercury poisoning in one of his patients. Inquiries failed to find any doctor on the staff who had made the telephone call, but as a precaution, samples of cheese cake and ingredients thereof were submitted to the Public Analyst, who reported that mercury was not detected in any of the samples.

One hundred and five cases of suspicious illness in eight incidents were investigated. No food poisoning organisms were isolated.

Fifteen alginate pads placed in the City Abattoir drainage system at various times were submitted to the Public Health Laboratory for bacteriological examination; this resulted in the isolation of the following organisms: *Salmonella typhimurium* (2), *Salmonella agona* (2), and *Salmonella lagos* (1).

Unsound food

Visits were made to the premises of wholesalers and retailers on 510 occasions for the voluntary surrender of unsound and unsaleable foods; this necessitated the issuing of 1,806 certificates of unfitness.

The amounts of foods surrendered and destroyed were:—

	tons	cwts.	qtrs.
Canned meat and fish	11	3	3
Fresh meat	1	6	6
Frozen foods	7	19	4
Miscellaneous canned goods	13	18	0
Other foods	4	9	4
	38	19	1

The Imported Food Regulations, 1968

The number of unexamined containers of foodstuffs, other than fresh meat and vegetables, received into the City during the year was 88. The containers, which held a variety of foodstuffs, are summarised below :—

All the containers and contents were examined, and all new brands and varieties of foodstuffs were sampled and submitted for examination.

Commodity	No. of containers	Commodity	No. of containers
Biscuits	36	Hops	1
Canned fruit	13	Lard	2
Canned meat	1	Raisins	10
Canned salmon ..	8	Rice	13
Canned tomatoes ..	1	Wheat germ	1
Canned vegetables ..	1	Wheat gluten	1

Liquid Egg (Pasteurisation) Regulations, 1963

The sampling of liquid pasteurised egg was continued by visits to bakeries in various parts of the City, where samples from diverse producers were obtained and submitted to the Public Health Laboratory for examination by the alpha-amylase test prescribed in the Regulations. All the samples satisfied the test.

Milk and ice cream control

In the supervision and distribution of milk, the regular inspection of dairies, equipment and methods was maintained, together with the sampling of milk for bacteriological and biological examination. Similar measures were taken in respect of the manufacture and sale of ice cream.

Dairies

Regular visits were paid to dairies and milk distribution depots in the City, and the general standard of cleanliness was found to be good. It was not necessary to institute legal proceedings in respect of any contravention of the Milk and Dairies Regulations, although one dairy was cautioned with regard to the number of churns which contained milk stone. The installation of a larger churn washer remedied this defect.

There are five dairies licensed for the pasteurising and sterilising of milk, one of which ceased during the year to sterilise milk and now obtains its supplies from a large processing dairy in an adjoining authority. These processing plants are regularly inspected and checked, and their efficient operation and maintenance is reflected in the high percentage of satisfactory results obtained on samples of processed milks taken at dairies, and from distributing vehicles and shops and in course of delivery to institutions. There were 531 such samples taken throughout the year, which were submitted to the prescribed tests laid down by the Ministry, namely, the phosphatase test for efficiency of heat treatment, the half hour methylene blue test for keeping qualities, in the case

of pasteurised milk, the turbidity test for sterilised milk, and the colony count test for ultra heat treated milk. Nineteen samples failed to pass the half hour methylene blue test for keeping qualities, and the majority of these were taken during the warmer months and from shops. The shopkeepers concerned were cautioned and advised not to carry stocks of milk from one day to the next. Repeat samples were satisfactory, and all samples submitted for the phosphatase, turbidity and colony count tests were satisfactory.

Prescribed tests of processed milk

Type of milk and test	No. of samples obtained	Satisfactory		Unsatisfactory	
		No.	Percentage	No.	Percentage
Pasteurised	203				
Phosphatase		203	100·0	—	—
Methylene blue		192	94·6	11	5·4
Pasteurised (C.I.)	64				
Phosphatase		64	100·0	—	—
Methylene blue		59	92·2	5	7·8
Pasteurised (Homogenised)	75				
Phosphatase		75	100·0	—	—
Methylene blue		72	96·0	3	4·0
Sterilised					
Turbidity	154	154	100·0	—	—
Ultra heat treatment					
Colony count	35	35	100·0	—	—
Totals	531	854	97·8	19	2·2

Milk in plastic bottles with a heat seal cap was introduced during the year by one dairy in an attempt to offset its loss of bottles from the shop trade. This method of milk packeting, so like the traditional glass bottle in which the milk can be seen, would appear to be more acceptable to the consumer than any form of cartoned milk.

Brucella abortus

The sampling of untreated milk was continued, when 21 samples of bottled untreated milk were submitted to the Public Health Laboratory. One sample from a City farm was found to be positive to the milk ring test, negative on "culture examination", but brucella infection was found to be present after the inoculation of a guinea pig. A notice was served on the farmer under the Milk and Dairies (General) Regulations, 1959, requiring him to have all milk produced on his farm heat-treated in accordance with the requirements of the Milk (Special Designation) Regulations, 1963–65, before sale for human consumption. Subsequently, individual cow samples were taken on three occasions with negative results, and the notice was withdrawn. Between the taking of the original sample and the results of the guinea pig inoculation, some six weeks later, two cows from the herd had been sold, and this probably accounts for the fact that no animal was found to be excreting *Brucella* organisms in the subsequent individual cow samples.

Langho Colony

Bi-monthly visits were continued for the sampling of milk produced on the Colony farm, and of pasteurised milk supplied by a processing dairy for use in the kitchens. Fifty-three samples of farm milk and 31 samples of pasteurised milk were examined by the Public Analyst for milk fat and non-fatty milk solids. One sample was found to be below the presumptive minimum standard of 3·0 per cent fixed by the Sale of Milk Regulations, but the average for the consignment was satisfactory, and 11 samples below the presumptive limit of 8·5 per cent for non-fatty solids were adjudged genuine as the result of the Hortvet freezing point test. Samples of both farm and pasteurised milk were submitted to the Public Health Laboratory for the methylene blue and/or phosphatase tests. All the samples passed the statutory tests with the exception of one pasteurised milk which failed the methylene blue test.

In July, the milking procedure was modernised by the installation of a refrigerated bulk milk storage tank into which milk is passed directly from the cow through a series of milk pipe lines without exposure to aerial contamination, thus eliminating the transfer of milk in open vessels to open coolers, and its storage in numerous churns at ambient temperatures.

The high standard of milk produced on the farm was maintained, the average analysis being, total solids 12·77, non-fatty solids 8·88, and fat 3·89.

Regular inspection of ice cream premises was maintained and the general standard of cleanliness was good. In no instance was it necessary to institute legal proceedings in respect of unsatisfactory premises or equipment, and no infection was found or reported to the department as being attributable to this commodity.

Food and drugs adulteration

The number of samples submitted to the Public Analyst for examination was 2,262. Included in this figure were 646 milk samples, of which 605 were random samples taken from the dairies and during retail distribution to consumers, depots, shops and on delivery to institutions. Fourteen samples were reported as unsatisfactory, eight contained traces of added water, three contained between 1 and 3 per cent added water, two were deficient in fat and one was sour. Investigations revealed at one dairy a fault in procedure and, after complete reorganisation of the milk and water lines, this was remedied. Another dairy, with over 95 per cent of its milk supplied in bulk by tanker, carried out checks on tanker milk and dairy procedure in order to elicit the source of the added water. All repeat samples were satisfactory. The sample reported sour had been purchased from a shop and the shopkeeper was cautioned and advised on the storage and keeping qualities of milk.

Milk samples from producers' consignments to City dairies numbered 41. Twenty-six samples from six consignments were found to contain added water, from a trace to 49 per cent. Legal proceedings were taken against two farmers concerning 13 samples, and fines totalling £45 with £25·05 costs were imposed. Four farmers who were concerned with 13 samples were cautioned, and one milk sample from a consignment of four churns was found to be deficient in fat to the extent of 4 per cent, but when considered as a whole the consignment was above the legal limit and therefore satisfactory.

Fifty-two samples of milk having less than 8·5 per cent of non-fatty solids (the presumptive minimum fixed by the Sale of Milk Regulations) were adjudged to be genuine by the Hortvet freezing point test. Again, the majority of these occurred during the winter and early spring when the animals are kept indoors, and were no doubt due to loss of condition and faults in feeding procedures.

All milk sampled and examined for antibiotics was found to be free from these drugs.

Other food and drugs samples obtained and submitted for examination to the Public Analyst numbered 1,615, of which 47 were reported as adulterated or unsatisfactory. These were dealt with as follows :—

Two formal samples, both of which had previously been adversely reported upon informally, were the subject of legal proceedings. The manufacturer of pork sausages, which were found to be deficient in meat to the extent of 15 per cent of the minimum legal requirements as defined in the Sausage and Other Meat Product Regulations, 1967, was fined £5 with £5 costs. The manufacturer of steak pies, which were found to be 64 per cent deficient of the legal minimum meat content as laid down in the Meat Pie and Sausage Roll Regulations, 1967, was fined £10 and £5 costs.

Legal proceedings are pending in respect of canned frankfurter sausages which were found to contain less than the legal minimum meat content informally, and on two occasions as formal samples.

Of seven other samples of meat products concerning canned luncheon meat, canned steak and kidney pie, and canned stewed steak (5), deficient in meat content as defined in the various regulations, repeat samples of six were satisfactory, and no further stocks of the remaining one were available for further examination.

Nineteen pre-packed products, namely, beetroot (3), biscuits (3), canned minced beef and onions, canned mussels, dried soup, cough mixture (2), dried paella, kelp tablets (2), low fat spread, pickle, and red cabbage (3) were reported as having unsatisfactory labels, and two of these had been repeated formally. Ten manufacturers or packers were cautioned and in three instances the stock was withdrawn from sale; in other cases the labels were to be amended. In six cases legal opinion was sought as a result of which no further action was taken.

Two samples of canned strawberries contained an unpermitted colour which had been removed from the list of permitted food colours by the Colouring Matter in Food (Amendment) Regulations, 1970, which came into operation on the 1st January 1971. In both cases they had been manufactured before the amendment regulations became operative. All stocks were withdrawn from sale.

Canned shandies were the subject of two adverse reports. One had an excessively high content of proof spirit of which the manufacturers were aware, and were in process of withdrawing the batch concerned from sale. The other shandy had a proof spirit content of less than 1·5 per cent which is below the standard laid down by the Labelling of Food Regulations, 1970, which come into operation on 1st January, 1973.

The lead content in samples of canned sardines and a canned soft drink were found to be above the limits as defined in the Lead in Food Regulations, 1961. In the case of the sardines, the entire stock was withdrawn from sale until repeat samples were found to be satisfactory. Repeat samples of the soft drink were also found to be satisfactory, and no further action was taken.

Vitamin deficiency reported in an informal sample of calcium and vitamin tablets was repeated when a formal sample was analysed. This was found to be the result of long storage by a shopkeeper who was cautioned and advised. The manufacturer of a soft drink reported as deficient in vitamin content was cautioned, and again the deficiency was due to long storage in the retail shop, and the stock was withdrawn. A repeat sample of flour, deficient in vitamin content, was found to be satisfactory.

Four samples of sausages were found to contain preservatives which, although within the legal limits, were undeclared, with the result that the three shopkeepers concerned were cautioned and appropriate notices were obtained and displayed in the shops. At the end of the year results were awaited in connection with a further seven samples.

Three hundred and one complaints were received from private purchasers of food and drugs with regard to quality or the presence of foreign bodies. Investigations and enquiries were carried out with manufacturers and/or shopkeepers in an endeavour to discover the origin of the complaint, and to prevent further similar incidents occurring.

Legal proceedings were instituted in three cases as follows: an Easter egg which was stale, bloomed, and was over 12 months old; liver pills which were discoloured and mouldy; and an apple tart containing a metal shaving, the result of a defective can opener. Fines and costs amounting to £60 were imposed. Legal proceedings are pending in two cases concerning a chicken portion alleged to be sour, and a packet of dripping alleged to contain dead flies.

The samples of food and drugs which failed to meet the requirements of the Food and Drugs Act, Regulations or Orders, are summarised in the following tabular statement:—

Adulterated and other unsatisfactory samples and action taken

Private and informal samples						Legal proceedings						Article	Formal samples				
Adulterated or unsatisfactory	No further stocks available	Further samples obtained	Stock withdrawn	Submitted for legal opinion	Cautions	Summonses	Number of samples	Number of convictions	Number dismissed	Amount of fines	Amount of costs		Adulterated or unsatisfactory	Further samples obtained	Stock withdrawn	Cautions	Number of samples
66†		14			5	2	13	2		£45	£23.05	Milk	27‡			4	27
1						1	1	1		£10	£10	Apple tart					
3				2	1							Beetroot					
3					1							Biscuits					
1		1										Calcium and vitamin tablets	1			1	1
6	2	4										Canned meats					
1					1							Canned mussels					
1		1										Canned pork luncheon meat					
1		1										Canned sardines					
2	1		1									Canned shandy					
1		1										Canned steak and kidney pie					
2	1		1									Canned strawberries					
1		1										Cough syrup	1			1	1
1				1								Dried paella					
1			1									Dried soup					
1						1	1	1		£20	£5	Easter egg					
1		1										Flour					
1		1				1*						Frankfurters	2	1			2
1		1										Kelp tablets	1			1	1
1						1	1	1		£10	£5	Liver pills					
1				1								Low fat spread					
1	1				1							Pickles					
1		1				1	1	1		£5	£5	Pork sausages	1				1
3				2	1							Red cabbage					
4					3							Sausages					
2		1	1									Soft drinks					
1		1				1	1	1		£10	£5	Steak pies	1				1

† Includes 52 samples adjudged genuine by the Hortvet freezing point test. * Summons withdrawn—further sample obtained.

‡ Includes one Fat deficiency—average for consignment satisfactory.

Clean Air

Since 1959 the amount of smoke in Manchester has been reduced by about two-thirds and the amount of sulphur dioxide by about one-third. The downward trends in smoke and sulphur dioxide pollution are encouraging, but levels of air pollution in most parts of the City are still too high and need to be further reduced if the target of acceptable levels is to be achieved.

About 80 per cent of the remaining smoke and a high proportion of the remaining sulphur dioxide come from domestic sources. The most serious single component of air pollution in the City is still domestic smoke, containing a lot of tarry matter discharged at low level and low temperature from thousands of ordinary house chimneys where coal is burned. Accordingly, the establishment of smoke control areas remains a top priority. Over 26 square miles of the City (about 61.3 per cent of the total area) are subject to smoke control orders and orders to cover the remainder are to be introduced systematically as quickly as possible.

Apart from domestic smoke, the worst outstanding source of low level smoke is the burning of waste materials in the open. Section 1 of the Clean Air Act, 1968, includes punitive provisions to deal with emissions of dark smoke from these sources and seventeen contraventions were reported in 1971. Formal cautions were issued in five of the cases because of extenuating circumstances, but legal proceedings were instituted in the other twelve cases. Seven cases came to Court during the year. In one case proceedings were adjourned, *sine die*, on an undertaking from the car-breaker involved to move to other premises. In the other six cases convictions were secured. Fines and costs were imposed as follows:— in one case £5 plus £3 costs; in one case £15 plus £3 costs; in one case £15 plus £5 costs; in two cases £20 plus £10 costs; and in one case £50 plus £5 costs. Thus, whilst more substantial fines were imposed by the Courts as a result of proceedings instituted by the Corporation in respect of this kind of contravention, in some instances the fines imposed appeared to be derisorily small and ineffective.

In this context, i.e. the prosecution of offenders for burning waste and emitting dark smoke, it is particularly important to ensure that the Corporation itself avoids contravention of the Act, and the attention of all departments has been drawn to this.

Industrial smoke from chimneys now forms a relatively minor part of the smoke problem. Sporadic emissions do occur and some of them could be avoided, but the small number of contraventions of the Dark Smoke (Permitted Periods) Regulations, 1958, which are revealed by observations, indicates that most remaining industrial smoke emissions from chimneys are either accidental or are covered by the technical defences of the Act. Two contraventions of the Regulations were reported, due in one case to the burning of waste in a boiler, and in the other case to the burning of waste in an incinerator. Legal proceedings were instituted in connection with the burning waste in the boiler and the firm was fined £5 plus £3 costs. A caution was issued in the other case.

Apart from smoke there are other kinds of air pollution from industrial sources which need to be reduced. During the year, in addition to the usual "open patrol system" to observe smoke, visits were made to find the potential

sources of "air pollution" inside factories, and to attempt to eliminate them at the point of origin. An introductory letter explaining the objectives and inviting co-operation is delivered to the appropriate manager or engineer at the time of the inspector's visit. The effect appears to have been beneficial in promoting improved maintenance and control.

The shortage of solid smokeless fuels suitable for open fires, which necessitated the temporary suspension of all the nine "gas coke" smoke control areas from 22nd December, 1970 to 30th April, 1971, was mitigated by an unusually mild winter, but a good deal of coal was burned in those areas and the amount of smoke recorded substantially increased during the winter period. After this fuel shortage was resolved the Department of the Environment issued Circular No. 53/71 in July 1971 ("Domestic Smoke Control—Availability of Solid Smokeless Fuel") requesting local authorities to review their smoke control programmes with a view to achieving more rapid progress. The review was carried out and some streamlining of methods introduced to secure faster progress in the future.

The suspended smoke control orders came into operation again on 1st May, 1971. The return to control was publicised by notices in the press and the affected areas, as well as by information exhibited in clinics, libraries, schools and doctors surgeries, and the opportunity was taken to stress the advantages of clean air. The temporary return to dirtier air in some areas did not go unnoticed by some residents who had become used to the advantages of living in a smoke control area. Despite this minor item on the credit side, such suspensions must be regarded as a seriously retrograde step which disrupted the smoke control programme, permitted increased pollution, caused genuine uncertainty among householders and enabled a few reactionary coal merchants and householders to plead ignorance or confusion after control came back into operation.

The Manchester and District Coal Trade Association continued to co-operate with the clean air policy and has ensured that its members are fully informed about the extent and operative dates of smoke control orders in the city, and about the provisions of the Clean Air Act, 1968, section 9, which make the acquisition and sale of unauthorised fuel in smoke control areas offences carrying penalties not exceeding £20.

Despite the Association's co-operation there was some sale of coal in smoke control areas and it was necessary to take formal steps to deal with these contraventions. Legal proceedings were instituted in respect of four such offences and one case was heard in December.

The defendant pleaded guilty; and averred, in mitigation, that it was an isolated offence where he had delivered coal to an old age pensioner who could not afford the price of solid smokeless fuel. A conviction was secured and the Court imposed a fine of £3. A headline in a national daily newspaper next day read, "Kind Hearted Coalman is Fined", and the report implied that the proceedings represented bureaucratic interference with an altruistic act. Needless to say the actual circumstances were somewhat different from those pleaded and reported and the outcome of the other three outstanding cases, and any others which may accrue, is awaited with interest.

The price differential between coal and solid smokeless fuel (30p per cwt at the present time) induces pensioners and others on low incomes to accept

coal if they are offered it. The real offenders are those who offer it. While such sales of coal account for a very small proportion of the solid fuels used in the smoke control areas, they are a source of embarrassment to the local authority by bringing smoke control into disrepute, to bona-fide fuel merchants by reducing their legitimate sales of solid smokeless fuels and to householders by making them liable to prosecution. It is hoped that persistent prosecution of offending merchants will stop the practice.

Section 9 of the Clean Air Act, 1968, does not cover the sale to a customer who collects the fuel at the vendor's premises, or to any retail sale over the counter. Accordingly the anomalous situation arises that, whilst it is an offence for a merchant to sell and deliver coal in a smoke control area, a shopkeeper in the area can sell coal within the law. Presumably the justification for the exemption of sales over the counter is "passing trade", but if coal is available at the shops some local householders will buy and burn it. Shopkeepers are requested to stock smokeless fuel instead, but exhortation is only partially effective. It is a weakness in the legislation which should be removed; power to do so will probably be sought in the next Corporation Bill, and evidence of the extent of such sales is being sought.

The North Western Region has the highest domestic coal consumption per square kilometre in the UK. and it cannot be too strongly emphasised that domestic coal is the major contributor to ground level concentrations of smoke and sulphur dioxide both in the region and the City.

Manchester has the doubtful distinction of being the first place where, in 1848 the dark melanic "carbonaria" variety of the Peppered Moth was taken, indicating that the trees were already so dirty that the normal light coloured moth had become conspicuous against the blackened background and was being eliminated by birds.

The first indications of a reversal of the trend towards increasing melanism have been detected and were the subject of a report "Atmospheric Pollution and Melanic Moths in Manchester and its Environs" by Askew, Cook, and Bishop, of the Departments of Zoology at the Universities of Manchester and Liverpool, published in the Journal of Applied Ecology in April, 1971.

Such biological indications are welcome confirmation of the improvement in air quality which the clean air programme is producing. Air pollution is, nevertheless, still gross and obvious in some parts of the City and needs to be reduced much more before a satisfactory environment is established. Interference with an established ecology always has complex reactions and in the biological context it is worth reflecting that even cleaner air is not entirely an unmixed blessing. The increased incidence of Dutch elm disease may be partly due to reduction in air pollution and some authorities believe that fungal turf diseases, black spot and potato blight tend to become more prevalent with lower levels of air pollution.

Similarly, as the grosser aspects of background smoke and sulphur dioxide are being reduced, the number of complaints about fumes and odours has increased. The measurement and control of smoke, sulphur dioxide and particulate emissions is now fairly well understood, but the situation with regard to gases and vapours is substantially different. Extremely low concentrations of some airborne substances can constitute a nuisance. One of the

major problems of sampling is that steady-state conditions rarely prevail, and although sophisticated methods of investigation such as "Infra-red spectroscopy" and "Gas Chromatography" are available, in normal circumstances the best means for detecting and identifying odours is still a sensitive human nose allied with an astute human brain and a well developed capacity for careful observation.

In February, the Royal Commission on Environmental Pollution published its First Report. The Commission was appointed on 20th February, 1970, as a Standing Royal Commission "to advise on matters, both national and international, concerning the pollution of the environment; on the adequacy of research in this field ; and the future possibilities of danger to the environment."

The report illustrates the complexity of "pollution" and how the various kinds of pollution may be interconnected ; how, for example, the disposal of solid wastes might cause air pollution or water pollution. Since the first Clean Air Act became law in 1956, there has been a steady reduction in the emission of smoke and sulphur dioxide into the air over Britain, despite a 10 per cent increase in population and a 17 per cent increase in annual gross energy consumption, but, as the report observes, whilst a great deal has been done, and is being done, to safeguard the natural environment of Britain the record of action gives no grounds for complacency and "more needs to be done to apply this policy throughout the country and to enquire into the effects of pollutants from road vehicles."

The University of Manchester established, in July, 1970, an interdisciplinary Pollution Research Unit, under the direction of Dr. Norman Lee, which is currently engaged on a two year research project, jointly financed by the Science Research Council and the Social Science Research Council. The principal object of this research project is to survey the present state of knowledge so far as it relates to certain aspects of environmental pollution and to identify where the main gaps in knowledge lie. A final report, containing the results of this work, will be submitted to the two Councils in July, 1972.

A series of lectures given by members of the unit in October, November and December on "Pollution in the North West" was attended by inspectors from the department, while senior members of the staff participated in a series of seminars held by the unit during the earlier part of the year.

The following tables detail the contraventions reported to the Health Committee and the timed observations recording smoke emissions.

Cause of Emission	Action taken		Totals
	Caution	Prosecution	
Contraventions of section 1, Clean Air Act, 1956			
Burning of plastic waste in a boiler		1	1
Burning of waste paper, plastic etc., in an incinerator	1		1
Contraventions of section 1, Clean Air Act, 1968			
Burning of miscellaneous solid wastes on land ..	5	12	17
Contraventions of section 9, Clean Air Act, 1968			
Sales of unauthorized fuel in smoke control areas ..		4	4
Totals	6	17	23

Total amount of penalties and costs awarded was £133, with £39 costs.

Timed observations recording smoke emissions

	Number	Total amount of dark smoke in minutes
Infringement of Clean Air Acts	19	248
Dark Smoke, but not contravening the Clean Air Acts	310	564
No dark smoke	247	—
Totals	576	812

Liaison was maintained with the District Alkali Inspector in connection with the eleven works in the City now registered under the Alkali Etc., Works Regulation Act, 1906. During the summer some difficulty was experienced from emissions of sulphur dioxide and other fume from two of the works in the Bradford (Manchester) district. In one case, where the plant was near the end of its useful life, the particular process was discontinued ; in the other case—at a large works with complicated emissions involving considerable technical difficulties—the firm undertook a thorough enquiry and, subsequently, indicated their intention to undertake during the next five years permanent improvements, related to the waste gas system, which will cost approximately £150,000.

Operations at the steelworks at Openshaw have been considerably reduced due to the run down of some processes during rationalisation of the steel industry. Oxygen lancing of electric arc furnaces was discontinued during the summer and there have been no further complaints of emissions of red dust from the works.

Notification and prior approval of furnace installations

Under the provisions of the Clean Air Act, 1956, proposals to install any furnace with a rating of more than 55,000 B.T.U's per hour must be notified to the local authority before the furnace is installed ; and, to satisfy the requirements, any such furnaces must be capable, so far as practicable, of being operated continuously without emitting smoke when burning fuel of a type for which it was designed. It is not obligatory for the developer to request "prior approval" from the Corporation before installing the furnace (because, when installed, the furnace becomes subject to control under other provisions of the Act) but in practice—where relevant—every proposed new furnace installation is examined in relation to the "prior approval" requirements.

There were 395 plans and specifications received and examined in the year, and details of 104 furnace installations were submitted and approved.

The type of fuel to be used in boiler plants and other furnaces to which prior approval was granted was as follows :—

	<i>Fuel</i>	<i>Total installations</i>
Oil 26/35 seconds viscosity	72
" 200 " " (1·6 per cent sulphur)	1
" 200 " "	1
" 3,500 " "	3
Gas	25
Solid smokeless	2
		<hr/> 104 <hr/>

In addition, 10 new boiler plants were installed in the Central smokeless zone, where the over-riding requirement under the Manchester Corporation Act, 1946 section 35 is that no smoke shall be emitted from any premises, and where formal prior approval under the Clean Air Act is not appropriate. The fuels concerned were 200 seconds oil in one case, 35 seconds oil in two cases and gas in seven cases.

The furnaces approved included five specialised incinerators with gas fired after burners, a special furnace for melting iron-aluminium scrap, a cold blast cupola, a walking-beam reheating furnace and recuperator and two bacon smoking installations.

Proposals for the erection of 137 new chimneys were examined and approved under the provisions of the Clean Air Acts. In a further 12 cases, the proposed connection of new furnaces to existing chimneys was considered and one other case was in connection with a change of fuel.

In addition to the control of smoke, the policy of the City Council has, since 1956, also been directed towards securing a reduction in emissions of oxides of sulphur into the atmosphere. Where oil is used for heating Corporation buildings the grades selected for use have a sulphur content not exceeding 1 per cent (samples are analysed and the average sulphur content of the oil currently in use is 0.12 per cent). Where oil is proposed for use in privately owned plants, developers are invited to follow this example. A fair measure of co-operation was obtained and in some instances the use of a fuel with a lower sulphur content than that at first proposed was adopted. In some instances the use of Natural Gas/35 seconds oil on an interruptible basis was secured.

The winter daily average concentration of sulphur dioxide in the central commercial area of the city remains obstinately high. It has fallen from 479 $\mu\text{g}/\text{m}^3$ in 1959 to 312 $\mu\text{g}/\text{m}^3$ in 1971 but is still more than double the target level of 150 $\mu\text{g}/\text{m}^3$. Some further reduction may accrue as the establishment of more smoke control areas proceeds, but the amount of reduction that can be expected is unlikely to enable the target level to be achieved without the introduction of some control of the sulphur contents of fuels used in the central area. The case is being examined with a view to the possible inclusion of powers, similar to those in the City of London (Various Powers) Act, 1971, in the next Corporation Bill.

The number of visits to works 3,394 (4,544 for 1970) and to premises during the survey of smoke control areas 26,670 (27,428 for 1970) was less than last year, due to temporary secondment of staff to other urgent departmental duties and to the need for increased surveillance in the smoke control areas to prevent sales of coal.

Smoke control areas

The Clean Air (Suspension of Smoke Control—Manchester) Order, 1970 which temporarily suspended nine smoke control areas in the south of the city from 22nd December, 1970, to 30th April, 1971, because of a shortage of solid smokeless fuels suitable for open fires, terminated on 30th April and the nine orders became operative again on 1st May.

The Birchfields Smoke Control Order, relating to 544 acres (0.85 square miles) and 4,135 premises was brought into operation on 1st July, 1971.

In 1970, no smoke control orders were made but seven smoke control orders were made in December, 1971, and are awaiting confirmation from the Department of the Environment. Together they cover 1,264 acres (approximately 2 sq. miles) and 5,219 premises, and are as follows:—

- City of Manchester (Irk Valley) Smoke Control Order, 1971.
- City of Manchester (Butler Street) Smoke Control Order, 1971.
- City of Manchester (Livesey Street) Smoke Control Order, 1971.
- City of Manchester (New Cross) Smoke Control Order, 1971.
- City of Manchester (Oxford Road) Smoke Control Order, 1971.
- City of Manchester (Leicester Road) Smoke Control Order, 1971.
- City of Manchester (Stockport Road) Smoke Control Order, 1971.

Five of the orders relate to areas which have been or are being cleared of unfit houses and are in the process of redevelopment. The "Irk Valley" area is a mainly industrial and commercial area containing 1,263 premises—where redevelopment is taking place—and where the objective is to produce a "green finger" in what is one of the more heavily polluted areas of the city; and "Leicester Road" is to be dealt with as a combined smoke control area and general improvement area under the Housing Act, 1969. Accordingly, the actual work of bringing the orders into operation will be somewhat more complicated than normal.

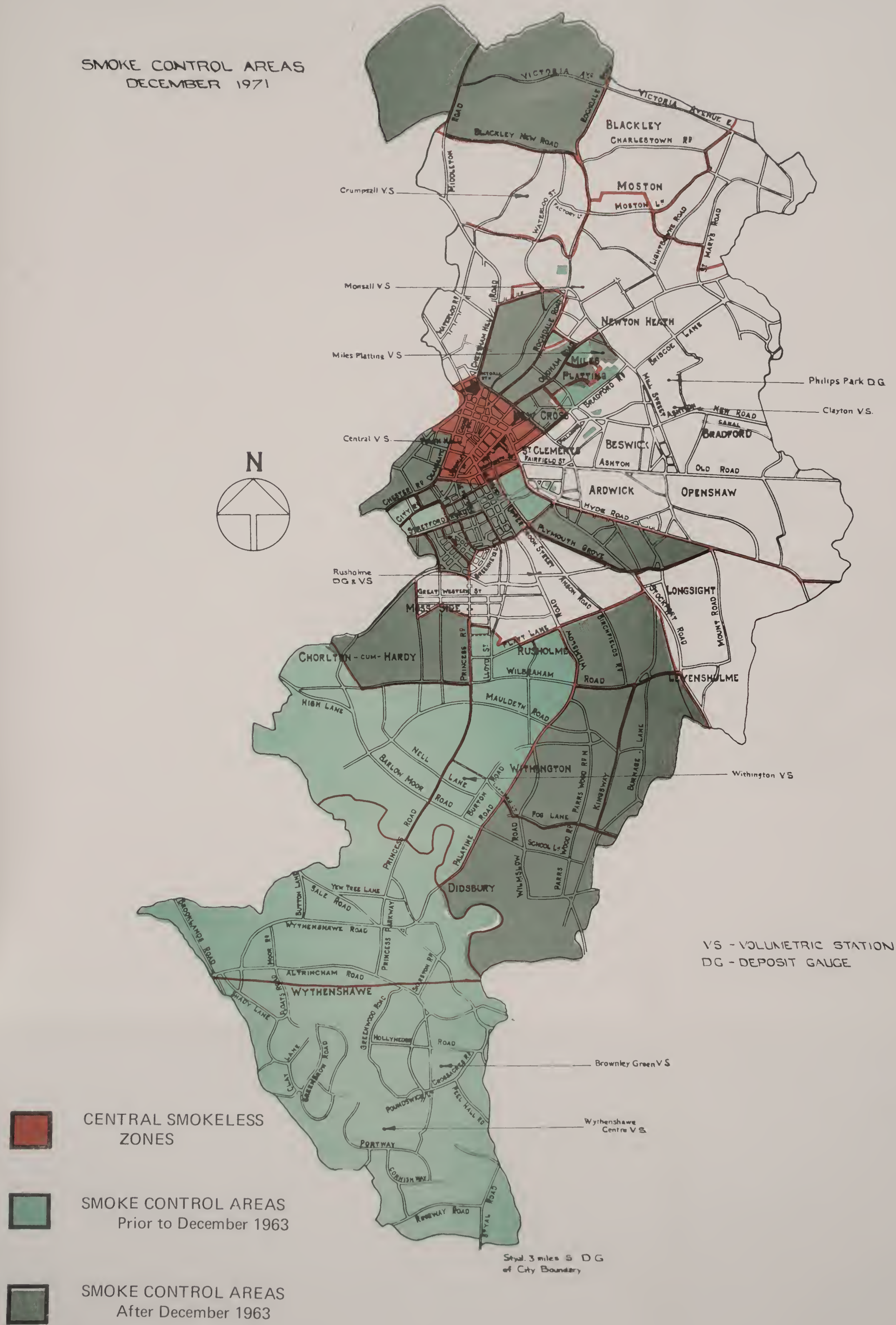
The following table and the appended map show the state of progress at the present time.

Item	Category	Acres	Total Premises	Dwellings	Not Dwellings
1	Number in valuation list at 1.4.71	27,255	218,536	180,775	37,761
2	14 Smokeless Zones made under the Manchester Corporation Act, 1946	523	4,764	2,623	2,141
3	9 Smoke Control Areas made on the "gas coke" basis	8,888	49,012	46,799	2,213
4	14 Smoke Control Areas made on the "hard coke" basis	6,030	37,192	34,366	2,826
5	Totals subject to operative smoke control orders	15,441	90,968	83,788	7,180
6	7 Smoke Control Orders "made" and awaiting "confirmation" ..	1,264	5,219	4,095	1,124
7	Item 5 as a percentage of Item 1	56.65	41.62	46.34	19.00
8	Item 6 as a percentage of Item 1	4.63	2.38	2.26	2.97
9	Percentage Remaining to be dealt with	38.72	56.00	51.40	78.03
10	Number remaining to be dealt with	10,550	122,349	92,892	29,457
11	4 Proposed Smoke Control Areas surveys in progress (approximately)	2,700	12,000		

- Note* In considering this table it needs to be borne in mind that:
- (a) Unfit dwellings in the areas not yet subject to smoke control orders—approximately 40,000 at the present time—are being dealt with by parallel action under the Housing Acts, and can, therefore, be deleted from the remainder of dwellings to be dealt with.
 - (b) The number of premises shown in Item 5 refers to the numbers in the areas at the time the orders were made and does not include new premises built subsequently during redevelopment. Accordingly, it is an understatement of the actual number of premises subject to orders.

CITY OF MANCHESTER

SMOKE CONTROL AREAS
DECEMBER 1971



During the period 1959–1971 inclusive, 23,564 new permanent dwellings were completed at various places within the City. It is known that some of them were built in smoke control areas after the relevant smoke control orders were made but, because of the complexity of overlapping boundaries and times, it is not practicable to say how many new dwellings fall into that category.

- (c) "Not dwellings" include *all* premises which are not dwellings and, outside existing smoke control areas, these are subject to control of emissions under other provisions of the Clean Air Acts 1956 and 1968.

The mechanics of establishing a smoke control area are complicated and cumbersome and involve a number of systematic steps. The department has to secure information and action from a number of places outside its control so that the "timing" of an area is difficult to control, and even more difficult to forecast.

The work involved in bringing different areas under smoke control has varied widely, being affected by such factors as the character of the particular area, the numbers and types of different existing appliances, the social class and habits of the occupants of the dwellings, how freedom of choice has been exercised, and the incidence and complexity of industrial plant in other included premises. Criteria such as area, number of premises, cost or reduction in pollution are each subject to reservations as to their reliability as bases for comparing one area with another. There is no reliable objective basis on which the amount of work involved in establishing an area can be assessed. Accordingly, in conducting the review of progress with a view to acceleration (referred to earlier in this report) attention has been particularly directed towards factors which have caused delays in the past, so as to reduce delays and achieve more rapid progress.

Up to the end of 1971, approximately £1,111,000 had been paid in grants to owners and occupiers of dwellings in the smoke control areas towards the cost of adaptations and replacements of appliances. The objective is to reduce air pollution, and smoke control areas are very effective in achieving this end. Further smoke control areas to cover the rest of the City are being systematically introduced as quickly as possible.

Whilst it is impracticable to maintain surveillance in all the smoke control areas all the time, supervision was carried out through the systematic visiting of the various smoke control areas (which now cover 26 square miles, about 61·3 per cent of the area of the City) and include many miles of streets and thousands of premises. Particular attention is given to areas where, for one reason or another, the department has reason to believe that smoke is being emitted.

Smoke emissions are sometimes traced to unusual sources. In one case smoke was traced to wood being burned in a bucket inside a house where the gas had been cut off for non-payment; in another case, investigation of smoke from a house chimney revealed that the carpet was on fire and the aged occupier was in difficulty trying to put it out. Prompt action averted what might well have proved to be a serious accident.

Recording of atmospheric pollution

The continuous measurement of smoke and sulphur dioxide was maintained at seven sites within the City by means of the daily volumetric apparatus. The daily averages for 1959–71 and the winter daily averages for the last twelve winters are shown in the appended tabular statements, block graph, and histogram.

It will be seen that despite the mild weather there were substantial increases in the amounts of smoke in the south of the city last winter and this was due to the burning of coal during the temporary suspension of the nine smoke control orders there because of the shortage of solid smokeless fuels.

As forecast last year, even temporary suspension of the orders has proved to be a serious setback to the improvements in air quality which had been achieved. Whilst the orders were re-instated on 1st May, some of the effects of the suspension remain, and it is in this context that the need to stop illegal sales of coal in the areas are of particular importance.

Arrangements were made for two of the measurement sites (at Monsall and Withington) to be moved to new locations nearby because of changes in the uses of the buildings in which the apparatus is housed. Two, possibly three, additional instruments are to be installed at new sites to give better measurement coverage in the eastern part of the City, so that data will be available for comparison after smoke control orders are introduced there in two or three years time.

Measurements of smoke and sulphur dioxide which were commenced in November 1970 as part of an air pollution survey being carried out by Esso Research Centre, Abingdon, Berkshire, to determine what part is played by petroleum fuels in the contamination of the atmosphere with sulphur dioxide and particulate matter, were completed during the year. A preliminary appraisal of the data has been completed and a final report is expected in due course.

During the year complaints were received about "fumes" in an underground car park. A series of measurements of carbon monoxide was taken and, although the concentrations revealed were not such as to constitute a hazard to health, they indicated shortcomings in the ventilation system which were subsequently remedied.

Measurement of deposited pollution (grit and dust) by the standard deposit gauge was maintained at Philips Park, Rusholme and Styal, representing industrial, residential and semi-rural areas respectively. The monthly and five year averages in the appended table show that the downward trend has been maintained. This is encouraging.

Standard Deposit Gauge 1971
(Grams per 100 square metres)
Monthly averages together with the averages for the previous five years

	Stations					
	Philips Park		Rusholme		Styal	
	1971	Five yearly average	1971	Five yearly average	1971	Five yearly average
Rainfall	61	77	64	75	71	70
Insoluble matter	543	564	351	370	116	117
Soluble matter ..	244	356	215	274	161	189
Total solids ..	787	920	566	644	277	306

Two series of measurements of grit and dust emissions from the boiler installations at Stuart Street Power Station were undertaken by the Central Electricity Generating Board and these were attended by inspectors from the department.

Volumetric apparatus for smoke and sulphur dioxide
Daily averages—microgrammes per cubic metre

	Crumpsall			Monsall			Clayton			Central			Rusholme			Withington			Brownley Green			Wythenshawe Centre		
	Smoke	SO ₂	Ratio	Smoke	SO ₂	Ratio	Smoke	SO ₂	Ratio	Smoke	SO ₂	Ratio	Smoke	SO ₂	Ratio	Smoke	SO ₂	Ratio	Smoke	SO ₂	Ratio	Smoke	SO ₂	Ratio
1960 ..	—	—	—	—	—	—	—	—	—	286	373	0·76	316	278	1·13	—	—	—	229	—	—	—	—	—
1961 ..	—	—	—	—	—	—	—	—	—	220	354	0·62	290	271	1·07	—	—	—	198	—	—	—	—	—
1962 ..	—	—	—	—	—	—	—	—	—	243	383	0·63	318	309	1·03	245	226	1·08	123	168	0·73	—	—	—
1963 ..	325	311	1·04	—	—	—	292	290	1·00	214	313	0·68	282	281	1·00	211	202	1·04	107	159	0·67	97	124	0·78
1964 ..	250	223	1·12	—	—	—	312	288	1·08	207	297	0·70	304	261	1·17	150	170	0·88	97	139	0·70	100	140	0·71
1965 ..	180	236	0·76	—	—	—	208	276	0·75	139	283	0·49	216	298	0·73	98	175	0·56	82	151	0·54	79	147	0·53
1966 ..	106	187	0·57	177	231	0·77	177	229	0·77	100	250	0·40	155	215	0·72	74	158	0·47	—	—	—	64	133	0·48
1967 ..	79	189	0·42	182	242	0·75	181	188	0·96	100	282	0·35	155	239	0·65	64	139	0·46	—	—	—	54	122	0·44
1968 ..	91	205	0·44	134	216	0·62	169	256	0·66	102	274	0·37	117	227	0·52	61	150	0·41	—	—	—	53	150	0·35
1969 ..	114	185	0·62	112	194	0·58	138	216	0·64	96	267	0·36	88	208	0·42	54	131	0·41	—	—	—	51	119	0·43
1970 ..	109	186	0·59	112	157	0·71	121	192	0·63	83	222	0·37	99	197	0·50	51	123	0·41	—	—	—	58	96	0·60
1971 ..	84	187	0·45	107	179	0·60	85	173	0·49	96	234	0·41	99	200	0·49	49	120	0·41	—	—	—	59	119	0·50

Winter Daily Averages
Smoke and Sulphur Dioxide—Microgrammes per cubic metre.
Winter = October to March, inclusive

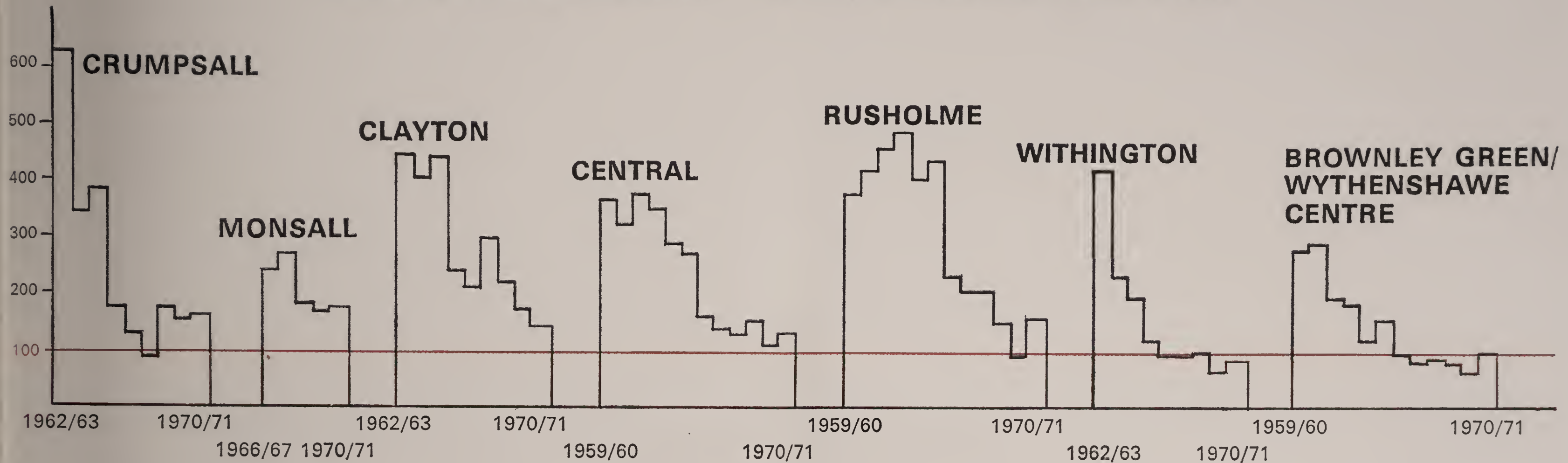
Station No.	(16) 1962 1970 Crumpsall		(19) 1966 1970 Monsall		(15) 1962 1970 Clayton		(11) 1959 1970 Central		(18) 1959 1970 Rusholme		(13) 1962 1970 Withington		(17) 1959 Brownley Green		1970 Wythenshawe Centre	
Winter	Smoke	SO ₂	Smoke	SO ₂	Smoke	SO ₂	Smoke	SO ₂	Smoke	SO ₂	Smoke	SO ₂	Smoke	SO ₂	Smoke	SO ₂
1959-60							374	479	384	325			287			
60-61	..						326	481	424	361			297			
61-62	..						383	587	464	434			198	217		
62-63	..				450	474	356	543	496	487	423	384	208	284	85	219
63-64	..	628			410	326	294	385	407	337	236	218	123	173	124	143
64-65	..	341			448	407	278	436	441	400	199	248	158	218	160	224
65-66	..	386			244	312	161	344	236	357	118	210			96	160
66-67	..	174			218†	223†	140	328	210	303	95	183			86	162
67-68	..	129			306	264	135	395	210	332	95	192			88	190
68-69	..	90*			222	313	156	391	150	274	98	187			80	172
69-70	..	178			175	237	116	307	92	246	67	149			65	102
70-71	..	152			149†	254†	142	312	159	243	91	167			105	138
	..	158														
	..	240														
	..	243														
	..	252														
	..	271														
	..	235														
	..	240														

*Crumpsall. 5 months average. Figure for March 1968 not available.

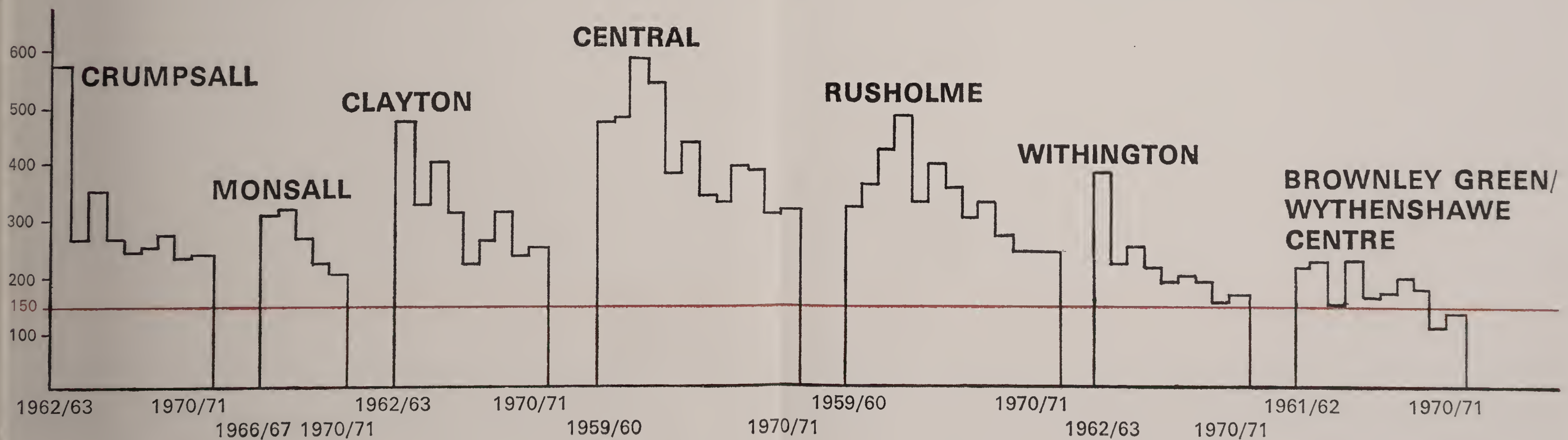
†Clayton. 5 months average. Figures for January 1967 and January 1971 not available.

WINTER DAILY AVERAGES 1959-60 to 1970-71

SMOKE MEASUREMENT Microgrammes per cubic metre

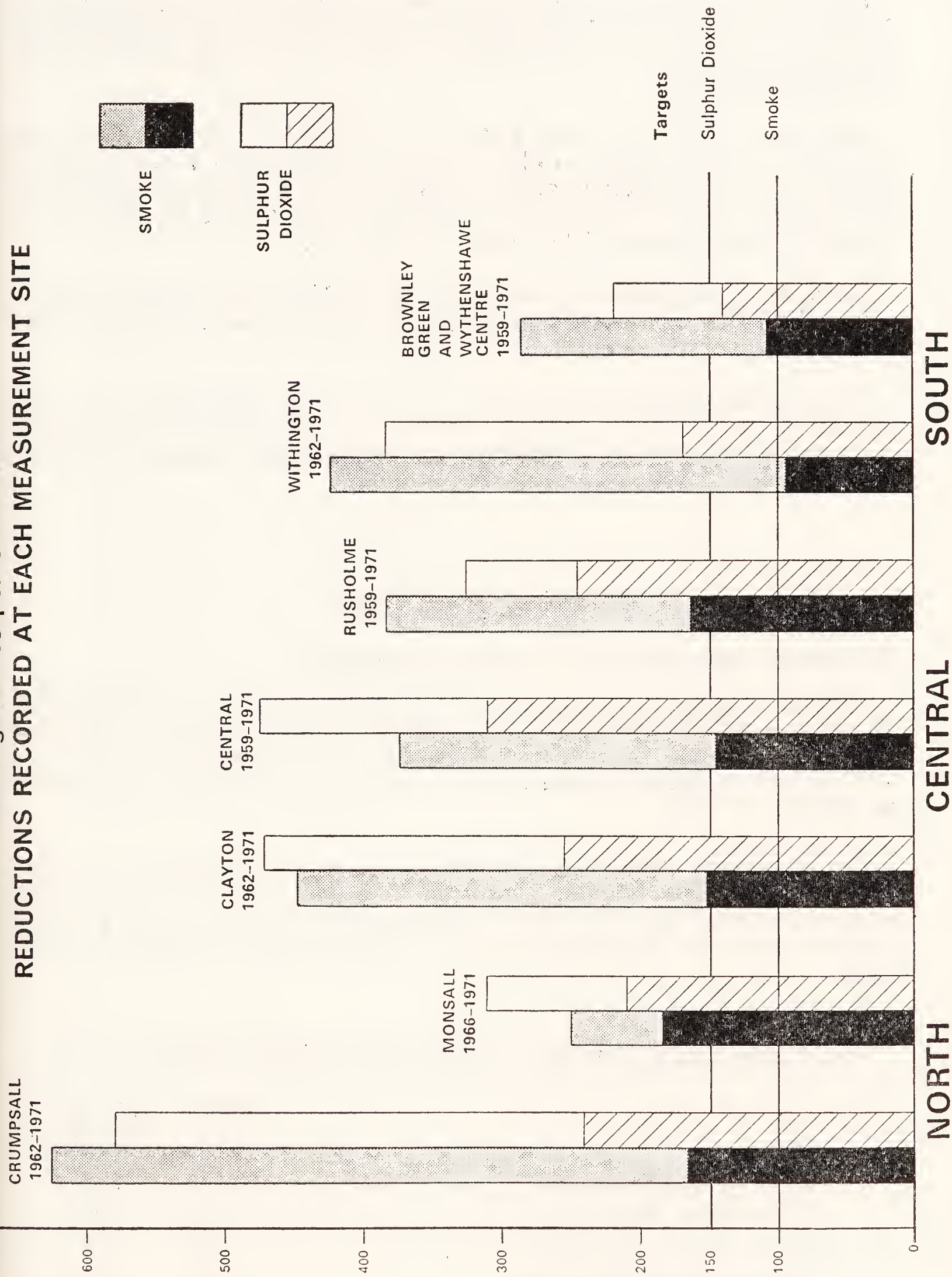


SULPHUR DIOXIDE MEASUREMENT Microgrammes per cubic metre



Microgrammes per Cubic Metre

REDUCTIONS RECORDED AT EACH MEASUREMENT SITE



Publicity and information

The department exhibited and manned a "Clean Air" stand at the Manchester Evening News "Domestic Heating Exhibition" at the Free Trade Hall from 16th–20th September.

Conservation, ecology, and pollution remained popular topics and subjects for projects in schools and colleges. The stand was exhibited at a large comprehensive school in the north of the City, where it was seen by 800 children in organised groups.

The department's illustrated lecture on "Control of Air Pollution" was delivered to 470 students in eleven schools; information was provided in reply to 40 written enquiries, and verbal and written information was given to 60 local students of different ages and grades who visited the department, individually, seeking material for use in projects etc.

Talks about air pollution were given at the Manchester Rotary Club, a Methodist Church in Rochdale, and a Presbyterian and Congregational Youth Conference in Derby.

Post-graduate visitors from Brazil, Ghana, South Africa and USA were entertained; enquiries from Tokyo and Paris were answered and information was provided in reply to a number of enquiries from press, radio and television news editors.

Housing Conditions

Clearance areas and individually unfit houses

The clearance programme involved the inspection of houses in 43 localities. These were taken mainly from those originally listed for action in 1971, but some were brought forward from the programmes intended for 1972 and 1973 as part of the project for completing the current clearance programme by the end of 1972.

The 43 areas were shown in the programme schedules to contain approximately 6,376 houses. During the course of the 1971 survey 7,063 properties were inspected in the 43 areas and out of this number a total of 5,863 houses were represented by the Medical Officer of Health as being unfit.

The location and composition of these areas is shown below.

<i>Area</i>				<i>No. of Houses</i>	<i>No. of Families</i>
Grove Street, Rusholme	..	..	..	147	135
Hythe Street, Rusholme	..	..	..	82	78
Thurloe Street, Rusholme	..	..	..	77	74
Barnhill Street, Moss Side	..	..	..	25	24
Parkfield Street, Moss Side	..	..	..	21	28
Aked Street, Ardwick	..	..	..	51	49

Old Elm Street, Ardwick.. ..	297	289
Upper Lloyd Street, Moss Side	610	604
Ackroyd Street, Openshaw	645	610
Duncombe Street, Moston	75	74
Rowland Street, Moston	21	18
Poynter Street, Moston	33	30
St. Mary's Road, Moston	15	14
Joyce Street, Moston	62	53
Adrian Street, Moston	351	332
Douglas Street, Moston	14	13
Henrietta Street, Moston	108	107
Weardale Road, Blackley	8	8
Holyrood Street, Newton Heath	10	8
Victoria Terrace, Newton Heath	10	8
Ashbrook Street, Openshaw	17	15
Briscoe Lane, Newton Heath	60	62
Dean Lane, Newton Heath	60	50
Droylsden Road, Newton Heath	30	30
Donleigh Street, Newton Heath	52	51
Oldham Road, Newton Heath	12	12
Culcheth Lane, Newton Heath.. ..	158	147
Parr Street, Openshaw	32	27
Well Street, Openshaw	41	34
Berry Brow, Newton Heath	36	34
Old Road, Blackley	7	7
Averill Street, Newton Heath	119	110
Levenshulme Road, Gorton	33	31
Graver Lane, Newton Heath	18	17
Queensferry Street, Newton Heath	213	203
Old Church Street, Newton Heath	186	160
Rink Street, Withington	291	271
Sherwood Street, Fallowfield	88	79
Barrington Street, Clayton	297	275
Beyer Street, Gorton	361	347
Rylance Street, Beswick	554	513
Lees Street, Gorton	132	126
Albert Grove, Longsight	404	394
	<hr/>	<hr/>
	5,863	5,551
	<hr/>	<hr/>

In some areas the number of unfit houses proved to be lower than is usually found and this accounts for the number of representations falling marginally below the target, despite the number of inspections exceeding the anticipated programme.

Some of the houses found not to be unfit will, however, be demolished as *grey* properties in future Compulsory Purchase Orders.

In addition to the 7,063 inspections in connection with the clearance programme, 2,866 houses were inspected where owners made objections in respect of public inquiries into Compulsory Purchase Orders.

In addition to the houses dealt with in clearance areas, a total of 321 individual houses were inspected and found to be unfit.

No fewer than 33 public inquiries were held in respect of Housing Compulsory Purchase and Clearance Orders. These Orders included 8,592 houses. This formidable number of inquiries is believed to be a record for one year outside the Greater London Council area and on several occasions as many as three inspectors from the Department of the Environment were working simultaneously on tours of inspection of properties in the areas covered by the Orders.

There were 25 Compulsory Purchase and Clearance Orders, involving 6,081 houses, confirmed. In only 292 instances (4.8 per cent) did the Department of the Environment's Inspector change the classification of the premises. In the confirmed areas a total of 1,200 houses was recommended for well maintained payments.

In 1967 the City Council approved a scheme under which houses in proposed clearance areas could be purchased in advance of compulsory purchase proposals if, on inspection, they were not unfit. The department considered 20 applications for such purchase. Detailed survey revealed that four houses were unfit, seven were fit; nine applications were withdrawn. The scheme has now been extended to include unfit houses.

Progress with the current clearance area programme reduced the number of houses awaiting clearance to 27,059 on December 31st, 1971. Of this number, 5,594 were in confirmed clearance areas, and, therefore due for demolition in the near future; 16,103 houses had been represented and were awaiting the decision of the Secretary of State for the Environment. A slight adjustment was made to the number of houses remaining in the current programme for inspection. This remaining programme now includes approximately 5,400 houses and these should be dealt with in 1972.

As clearance activities have spread from the inner regions of the City to areas further afield, the department has encountered difficulties in dealing with houses in old centres of population later engulfed in the development of the City. The character of these areas is quite different from the more conventional grid-iron pattern commonly encountered in clearance areas, and as some of the properties have the appearance of village dwellings there are strong moves to prevent their demolition on grounds of visual amenity and historical association, although all such houses included in proposed clearance areas are unfit and the majority of them seriously so. The historical value of such houses is doubtful and their worth as a visual amenity a matter of opinion, but their retention has to be judged in the context of their value as healthy housing accommodation and the economic cost of eliminating lack of amenity, inherent defects and, as a rule, many years of bad maintenance. In the controversy which surrounds the retention, or otherwise, of these areas much is said on behalf of those who object to the demolition of the property, but there is less vocal support for those who plead to be rehoused.

As the year concluded, six areas of varying size in Blackley, Gorton and Rusholme were under consideration because of representations made concerning their future, and a number of other areas will fall into this category in the future.

Rehousing for medical reasons

Investigations for rehousing or transfer to other accommodation on medical grounds numbered 3,778. In appropriate instances the Medical Officer of Health made recommendations to the Housing Manager in respect of varying degrees of priority for rehousing. This scheme of appraisal and recommendation for speedier rehousing where it would be helpful is, on the whole, valuable, but the distinction made between applications from tenants and owner occupiers is difficult to reconcile with the need to accord priority on medical grounds. This is especially the case when the rate of owner occupation in privately owned housing continues to increase. This problem was the subject of interdepartmental discussion and, as an outcome, there is a possibility of an amended scheme being introduced.

In the course of the year the Housing Manager notified the rehousing of 1,509 households as a consequence of recommendations previously made by the Health Department.

Overcrowding

There has been no systematic survey to discover the extent of overcrowding either nationally or in the City since 1937. The evidence which comes to the department through its multifarious activities is that overcrowding does not appear to constitute a major problem. However, in an attempt to make an up to date assessment of the situation, advantage is to be taken of a house condition survey to be carried out in 1972 to make a statistical assessment of the extent of the overcrowding position.

Every complaint of overcrowding made to the department was investigated. In cases where the family was already registered with the Housing Department the case was referred to the Housing Manager and in other cases the family was advised to register for the tenancy of a Council dwelling.

Residual life of property

Each year the department deals with many enquiries relating to the residual life of property. These enquiries are made by post, telephone and in person. Most of the enquiries come from members of the public or professional advisors acting for them. Many enquiries come also from other departments for the information is of vital importance to them. A total of 24,720 enquiries was dealt with, including local land charge enquiries.

The length of time a house may be expected to provide satisfactory living accommodation is of great importance to the Corporation as it affects the City's housing stock and, hence, housing policies, and it is of importance to the individual in satisfying his need for a house.

On behalf of the Corporation the department undertakes the assessment of the residual life of houses. This is a task calling for considerable skill, knowledge of housing and mature judgement. A number of activities was undertaken in connection with the appraisal of the houses in the City. The system of

recording probable residual life was revised and preparations were made for a house-by-house review, the results of which will be coloured on to 1 : 500 scale plans. This will give a graphic indication of areas where future action is required.

In order to assist the City Council to review their housing policy a provisional residual life survey of the houses in the City was carried out in 1971. This involved the review of all the information possessed by the department together with a block by block survey of every house in the City. This undertaking engaged virtually the whole of the augmented resources of the housing survey section for a period of three weeks and was contributory to the somewhat distorted pattern of clearance activity. The survey showed that in the next 10 years about 1,500 houses could be expected to become unfit and form a supplementary clearance programme. This number must, however, be regarded with considerable reserve. The situation is dynamic and not static and many forces will affect both the future rate at which houses become unfit and social attitudes to housing.

The Deputy Chief Public Health Inspector was seconded to the Department of the Environment for a period of about two months to assist in a national house condition survey. The release of a senior officer for such a length of time clearly imposed strains on the administration of the group but, viewed in the context of the contribution of Manchester's housing knowledge to the national need and the acquisition by the department of more experience in modern techniques of sample surveys, the secondment was well worthwhile. Indeed, as a direct consequence of this, the department was able to make preparations, not only to carry out a full scale house condition survey in early 1972, but to provide the information and organise a final pattern for a conurbation survey, to be executed by other authorities. This is an important and interesting activity which will give vital information concerning the City's housing stock and be of value in formulating future housing policy.

Houses in multiple occupation

The register required to be kept under the City of Manchester (Houses in Multiple Occupation) Informatory and Regulatory Scheme, 1970, is now in operation.

Control of approximately 4,500 houses of varying standards, known to be in multiple occupation, is being exercised under this scheme and also under the Housing Acts, 1961 to 1969, and section 57 of the Manchester Corporation Act, 1950.

Formal action was necessary to deal with unsatisfactory conditions or defects at 334 premises. Thirty Management Orders were made where unsatisfactory conditions continued despite formal warning and 29 prosecutions for various contraventions of the legislation were instituted. Penalties imposed and costs amounted to £160·70.

Applications to register or renew registration were received in respect of 638 dwellings and dealt with. In some instances consent to register was conditional. Liaison with the Chief Fire Officer, who is responsible for dealing with means of escape in case of fire at houses in multiple occupation, continued. Fifty-six applications were received for special grants for improvements to houses in multiple occupation.

New permanent dwellings completed

In 1971, the Corporation completed the construction of 4,021 dwellings; 2,225 in the City and 1,796 outside. In the City, private developers built 852 dwellings.

The annual totals since 1946 have been as follows :—

Year	Completed by the City Council		Completed by private builders
	Dwellings in the City	Dwellings outside the City	Dwellings in the City
1946.. ..	293	—	36
1947.. ..	542	—	197
1948.. ..	1,772	—	356
1949.. ..	1,461	—	298
1950.. ..	2,146	—	270
1951.. ..	2,415	—	209
1952.. ..	2,142	80	322
1953.. ..	2,162	437	390
1954.. ..	1,055	1,086	303
1955.. ..	692	1,251	566
1956.. ..	684	684	368
1957.. ..	751	796	514
1958.. ..	818	639	349
1959.. ..	517	965	239
1960.. ..	392	562	260
1961.. ..	816	445	381
1962.. ..	1,476	1,409	508
1963.. ..	1,424	2,442	282
1964.. ..	892	3,047	544
1965.. ..	1,354	2,076	561
1966.. ..	956	1,636	252
1967.. ..	1,957	827	417
1968.. ..	1,881	465	391
1969.. ..	1,993	1,009	263
1970.. ..	2,442	595	289
1971.. ..	2,225	1,796	852
Totals	35,258	22,247	9,417
	57,405		

Repairs and inspection of dwelling-houses

One of the oldest of the department's duties is the detection and suppression of nuisances and defects in dwelling-houses. As a consequence of the demolition of unfit houses the overall standard of housing has risen and the need to secure repair or abate nuisance at dwellings has declined somewhat. Nevertheless, 9,204 houses were inspected under Public Health Acts and Manchester Corporation Acts in respect of defects or nuisances and enforcement action was necessary in 6,998 instances. Following non-compliance with statutory notices, application was made in 39 instances to the Justices for abatement orders. Seventeen orders were made and the Corporation were awarded £126 costs. In 22 instances the necessary repairs were carried out in the interval between service of the summons and the Court hearing. Costs amounting to £36 were awarded in respect of these cases. Two

owners failed to comply with the Justices orders and summonses were issued. Fines and costs amounting to £60 were imposed for non-compliance. Repairs were carried out under default powers in 635 instances and, following the damage or theft of water service pipes, action was taken to restore the supply of water at 322 homes.

Rent control and qualification certificates

Under Part III of the Housing Act, 1969, the landlord of a dwelling-house subject to a controlled tenancy which has all the standard amenities, is in a good state of repair and fit for habitation may obtain a qualification certificate from the local authority. This will enable the tenancy to be taken out of rent control and become regulated instead. When this happens the Rent Officer will fix a fair rent which will probably be more than the controlled rent.

Secondly, where a landlord of a house subject to a regulated tenancy gets a grant from the local authority to do improvements, the rent can be increased only by having it registered by the Rent Officer.

In both instances the rent increments cannot be added all at once, unless these are very small, but must be applied as a number of annual increases.

The issue of qualification certificates is work which requires a great deal of care and judgement on the part of the public health inspectors concerned.

Housing Act, 1969, Part III—Qualification Certificates

	1970	1971	Total
Applications received	1,699	985	2,684
withdrawn	—	149	149
granted	10	451	461

The policy has been adopted of not refusing the applications where the house failed to meet the required standard. In such cases, a schedule of the items of disrepair or missing amenity was sent to the applicant, with the invitation to execute the work required to remedy the defects and offering a site meeting to discuss the nature and scale of the work required. The inspections revealed a disturbingly high proportion of houses which failed to meet the necessary standards. Some property owners took advantage of the departmental survey and repaired their houses. In some cases there was good co-operation between the owners, contractors and the department.

Rent Act 1957

No applications were received for certificates of disrepair.

Landlord and Tenant Act, 1962

Action was taken in all cases coming to the notice of inspectors, where there was non-compliance with the requirements of the Act relating to the provision of rent books and the information to be provided therein.

Improvement grants and general improvement areas

Improvement grants

Three types of house improvement grant were available.

Improvement grants for improving existing dwellings to a high standard, or for converting properties into flats and special grants for providing basic amenities for the overall benefit of houses in multiple occupation.

These two grants are payable at the discretion of the City Council.

Standard grants for providing certain amenities in existing dwellings, i.e. bath or shower, wash hand basin, sink, provision of a hot and cold water supply and a watercloset.

The grant itself is not a loan and does not have to be repaid.

The City Treasurer, through the Finance Committee's home loans scheme assisted owners in some instances with a loan to cover their share of the cost of the work.

Since 1954, when standard grants first became available for the improvement of individual houses, 4,561 applications have been dealt with and 2,961 approved.

Considerable publicity has been given to the availability of these grants and whilst there was an increase in the number of applications received, shown in the table below, they are not being taken up as rapidly as the department would wish, having regard to the fact that approximately 20,000 houses in the City lack some of the basic amenities but, otherwise have sound structures and are, therefore, improvable.

Type of grant	Approved		Disapproved		Pending		Withdrawn		Total
	owner/occupier	tenanted	owner/occupier	tenanted	owner/occupier	tenanted	owner/occupier	tenanted	
Improvement ..	24	21	13	1	82	62	7	1	211
Standard ..	273	56	31	7	156	192	45	40	800
Special ..	8	21	3	2	7	12	2	1	56
Totals 1971 ..	305	98	47	10	245	266	54	42	1,067
1970 ..	272	30	70	7	122	66	37	2	606

Most disapproved applications related to houses with short future lives.

General improvement areas

The City Council in 1970 declared three general improvement areas in which the environment as well as the houses are to be improved. One of these is concerned solely with a small Corporation housing estate and work is proceeding.

The other two, containing about 550 houses, are situated in Fallowfield and Cheetham. The department continued to acquire houses in both districts, either to improve or demolish to permit environmental improvement. These are pilot schemes and whilst progress has been slower than what was anticipated valuable experience is being obtained.

Common lodging houses

Accommodation for homeless persons and those without a settled way of life is provided in two common lodging houses for men, with a total of 643 beds and at hostels for men and women.

Two hostels are in the ownership of the Corporation and are referred to at page 67 of this report.

A common lodging house for men, provided by a social organisation in an adapted building, has been demolished and is to be replaced by a purpose-built hostel.

Caravan dwellers

Authorised sites

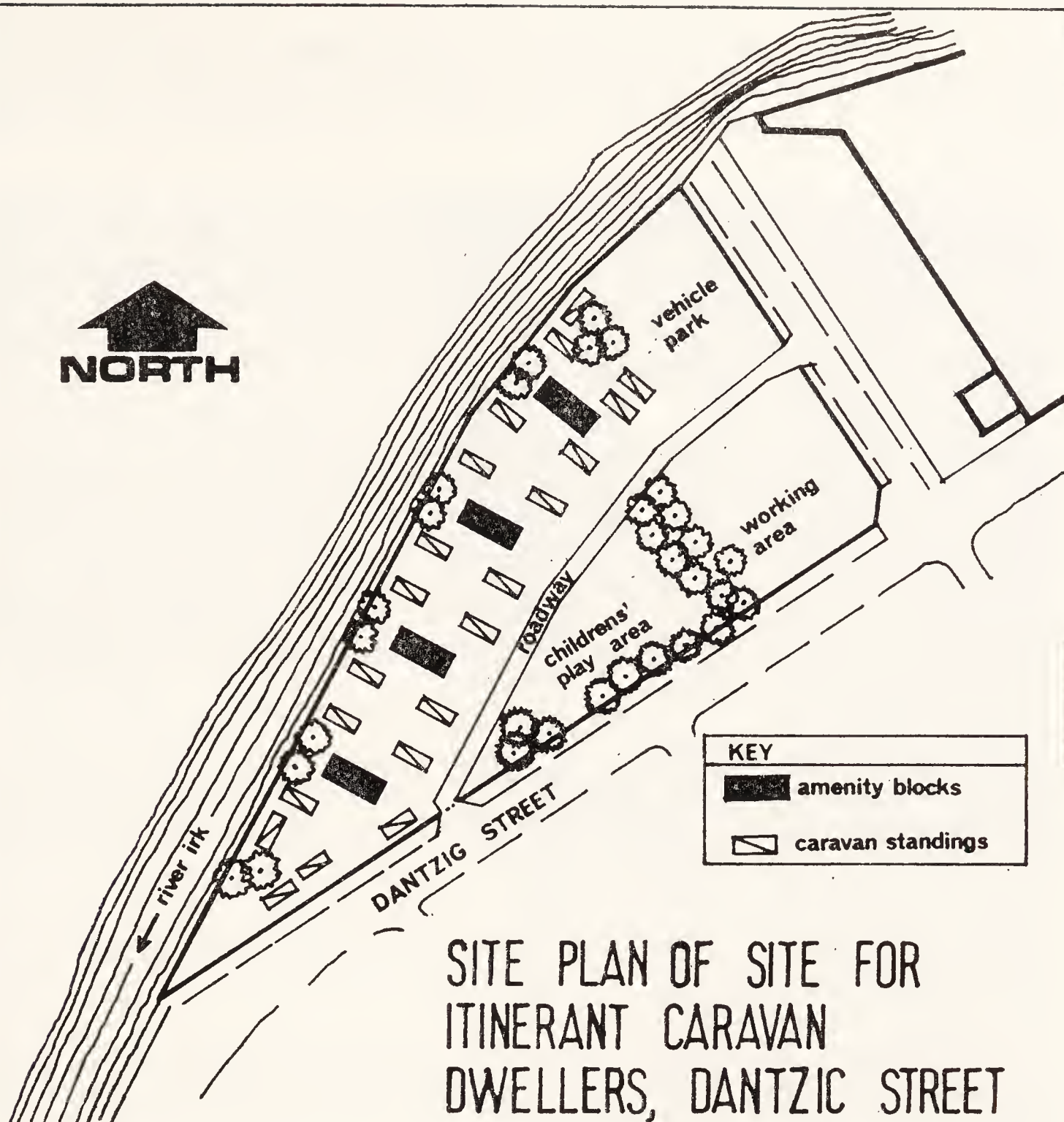
Two long established sites in private ownership, licensed in accordance with the Caravan Sites and Control of Development Act, 1960, continued to be inspected by the department. One site is affected by road works and operated temporarily under a provisional licence.

Itinerant dwellers

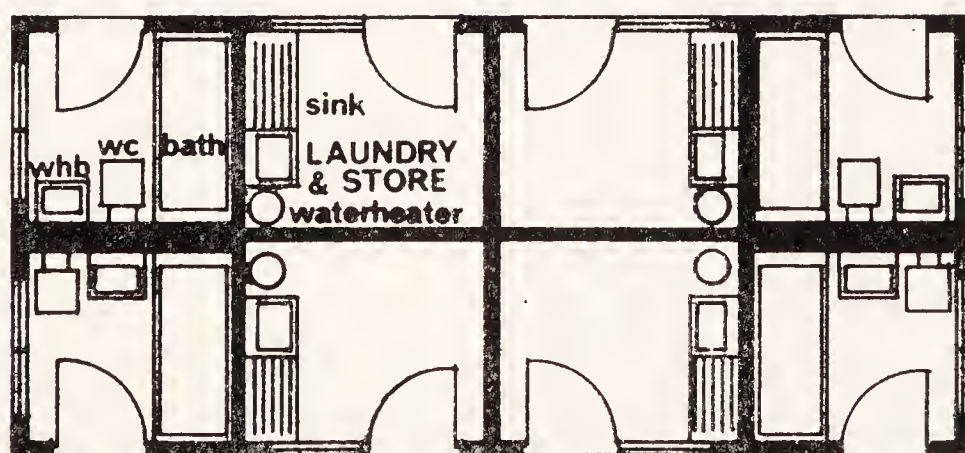
Itinerants with their van dwellings continued to be a problem. In deference to the Ministry of the Environments' request not to harass itinerants, action was only taken under the provisions of section 18 of the Manchester Corporation Act, 1956, to evict them from land following a complaint or to prevent a nuisance. Proceedings were instituted in 35 cases, though frequently, however, the itinerants moved before the legal processes were effected.

As a measure to prevent the occupation of vacant land in the ownership of the Corporation and generally awaiting development, the tipping of soil or rubble was resorted to. This was effective, but it encourages fly tipping and generally detracts from the appearance of the environment.

In dealing with complaints from the public, concerning the illegal occupation of land and alleged nuisances, several departments of the Corporation, as well as the police authority, may be involved ; to secure more effective control and remedial action the Health Department accepted the duty of co-ordinating the work involved.



SITE PLAN OF SITE FOR
ITINERANT CARAVAN
DWELLERS, DANTZIG STREET



PLAN OF AMENITY BLOCK

Gypsy caravan park

The Corporation complied with the requirements of the Caravan Sites Act, 1968 by constructing a permanent caravan site. This site was opened in June, 1971, by Alderman Dr. J. Taylor, J.P., Chairman of the Health Committee.

The site is located off Dantzic Street, Collyhurst and is intended ultimately to form the end of the Irk Valley linear park. The site is triangular in shape bounded by Dantzic Street, Warford Street and the River Irk which at this point is flowing in a deep channel. The other two sides are bounded by high brick walls which provide security and privacy.

A great deal of time was spent in the pre-planning of the site and much help was received from the gypsies representatives. The site is divided into four portions, a caravan park, a recreation area, a vehicle park and a working area. Sixteen pitches are in groups of four and each group has a building which contains an amenity unit. Each unit has a bathroom with a bath, watercloset and wash basin and a utility room with a stainless steel sink, a water heater and an electric socket outlet. This room also provides some storage space.

Reference to the accompanying plan indicates that the recreation and caravan park are segregated from the vehicle park and the work area so as to provide a pedestrian only area, except for service vehicles and when a caravan is moved.

Four pitches have two standings each so as to accommodate the families with two vans.

The layout and equipment of the site aroused considerable interest and was visited by representatives of several local authorities planning to construct caravan sites.

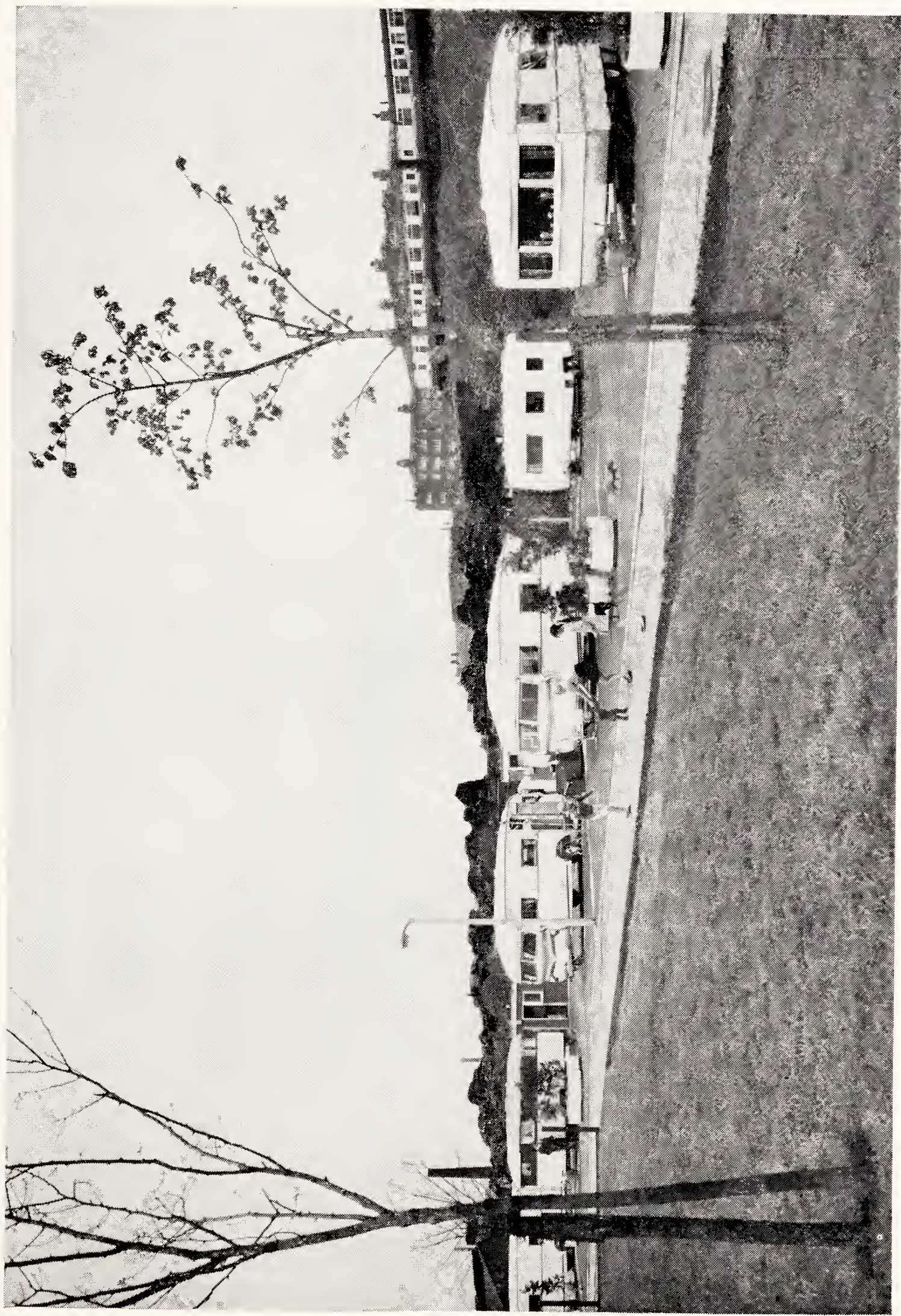
The management of the site was vested in the Environmental Health Services Division of the Health Department. The site was not used to the extent which it was hoped it would have been, and the illegal occupation of land within the City by gypsies continued.

Canal boats

Canal boats continued to be used for transporting grain from ship to mill. The work was again spasmodic, depending on arrival of grain carriers in the Manchester docks, and was continued by two transport agencies.

The canal boats were crewed by men who only sleep on board occasionally. No cases of infectious diseases were reported.

Thirty-five inspections were carried out at Hulme Locks. Defects found were reported to the two owners who arranged for the unsatisfactory conditions to be remedied.



Gypsy Caravan Site – Dantzic Street.

Occupational Hygiene

Industrial premises

With the exceptions of requirements in respect of sanitary accommodation in all factories and the cleanliness, overcrowding, temperatures, ventilation, and drainage of floors in factories without mechanical power, the responsibility for the enforcement of the Factories Act, 1961, and related regulations is that of the Department of Employment through H.M. Inspectors.

The number of factories on the departmental register and inspections made were :—

Premises	Number on register	Inspections	Number of written notifications	Occupiers prosecuted
(i) Factories (non-mechanical) in which sections 1, 2, 3, 4 and 6 are enforced by local authorities	350	52	—	—
(ii) Factories (mechanical) not included in (i) in which section 7 is enforced by the local authority..	4,120	446	39	—
(iii) Other premises in which section 7 is enforced by the local authority (excluding outworkers' premises)	74	35	—	—
Totals	4,544	533	39	—

Defects found were as follows :—

Particulars	Number of cases in which defects were found				No. of letters re defects	Legal proceedings instituted
	Found	Remedied	Referred to H.M. Inspector	Referred by H.M. Inspector		
Want of cleanliness (section 1)	—	—	—	—	—	—
Overcrowding (section 2)	—	—	—	—	—	—
Unreasonable temperature (section 3)	—	—	—	—	—	—
Inadequate ventilation (section 4)	—	—	—	—	—	—
Ineffective drainage of floors (section 6)	—	—	—	—	—	—
Sanitary conveniences (section 7)						
(a) Insufficient	1	—	—	1	1	—
(b) Unsuitable or defective	60	28	—	22	36	—
(c) Not separate for sexes	6	2	—	—	2	—
Other offences against the Act (not including offences relative to outworkers)	—	—	—	—	—	—
Totals	67	30	—	23	39	—

Non-industrial employment

Offices, Shops and Railway Premises Act, 1963

The department is responsible for the enforcement of the provisions of the Offices, Shops and Railway Premises Act, 1963, at 10,263 premises where 151,012 persons are employed.

The Act, which follows the pattern of the Factories Act, includes provisions relating to cleanliness, overcrowding, temperature, ventilation, lighting, sanitary conveniences and washing facilities, drinking water, safety of machinery, hoists and lifts, fire precautions, first aid facilities and the notification of accidents.

Premises registered in the year for the first time totalled 352 and the majority of these came to light as a consequence of an inspection by the department. The total number of registered premises and of persons employed at the end of the year is shown in the following table :—

Registration and general inspections				
Class of premises	Number of premises registered during the year	Number of registered premises at end of year	Number of registered premises receiving a general inspection during the year	Number of persons employed
Offices	228	4,951	955	100,196
Retail shops.. ..	80	3,737	799	23,236
Wholesale shops, Warehouses ..	22	637	241	14,108
Catering establishments open to the public, canteens ..	22	926	835	13,401
Fuel storage depots..	—	12	5	71
Totals	352	10,263	2,835	151,012

The total number of visits of all kinds made by inspectors to registered premises under the Act was 5,449.

An overall reduction in the number of registered premises occurred, mainly as a consequence of the redevelopment of an extensive area in the City centre. Most of the property demolished was over a hundred years' old and contained a large number of small office and shop units as well as some warehouses. This change, welcomed as a means of getting rid of property which could not be brought up to standards required by contemporary legislation, added appreciably to the clerical procedures associated with the operation of the Act.

There were 2,835 detailed inspections of premises under the Act, and the following unsatisfactory conditions were found and dealt with by formal correspondence and by follow-up visits.

Analysis of contraventions							
Section		Number of contraventions found		Section		Number of contraventions found	
4	Cleanliness	..	..	273	13	Sitting facilities	.. .. 2
5	Overcrowding	..	..	1	14	Seats (sedentary workers)	.. 36
6	Temperature	..	..	179	15	Eating facilities	.. .. 2
7	Ventilation	..	..	41	16	Floors, passages and stairs	.. 118
8	Lighting	..	..	75	17	Fencing exposed parts machinery	.. .. 53
9	Sanitary conveniences			114	18	Protection of young persons from dangerous machinery	.. 2
10	Washing facilities	..		130	19	Training of young persons working at dangerous machinery	.. .. 2
11	Supply of drinking water			4	23	Prohibition of heavy work	.. —
12	Clothing accommodation			39	24	First-aid	.. .. 258
						No abstract	.. .. 224
						Other matters	.. .. 200
					Total 1,753		

Legal proceedings

Legal proceedings were instituted against four firms in respect of seven breaches of the Act and Regulations, and fines and costs, amounting to £100 were imposed. In addition, it was necessary to apply to the Courts for Orders under the Public Health Acts to abate nuisance to office and shop workers arising from the noise from boutiques selling modern clothing.

Accidents

Section 48 of the Offices, Shops and Railway Premises Act, 1963, imposed on occupiers of premises the duty of notifying the Health Department, without delay, when an accident to an employee causes fatal injury or prevents a worker from carrying on his usual occupation for more than three days.

Notifications of 231 accidents were received. Most of them were preventable and appropriate advise was given by health inspectors during their investigations.

Analysis of reported accidents

	Offices	Retail shops	Wholesale warehouses	Catering establishments open to public, canteens	Total 1971	Total 1970
Machinery	6	3	—	1	10	18
Transport	—	1	3	—	4	3
Falls of persons	19	32	11	22	84	114
Stepping on or striking against object or person ..	14	9	10	6	39	61
Handling goods	9	10	5	10	34	37
Struck by falling object ..	5	5	5	14	29	22
Fires and explosions	1	—	—	—	1	3
Electricity	2	—	—	—	2	1
Use of hand tools	4	2	2	5	13	3
Not otherwise specified ..	6	2	2	5	15	35
Totals 1971	66	64	38	63	231	—
Totals 1970	98	85	35	79	—	297

There was no fatal accident.

Injuries sustained by employees of brewers in the handling of barrels and casks frequently occur, and the publication by the Brewers Society "Safety in the Pub" was welcomed. Additionally, various leaflets and pamphlets published by the Department of Employment, in its "Health and Safety at Work" series, are valuable. Most trade associations publish literature dealing with safety in its own industry. These often provide useful guidance for analogous situations and the department is building up a library of this material.

The Health Department has given considerable publicity to the publications in this series which includes one dealing with "The safe use of food slicing machines". Copies of this publication were distributed to users of such machines and they were found to be helpful. An additional booklet "Safety in the Stacking of Materials" became available during the year. Fortunately, accidents due to bad stacking are not common, but there is no ground for complacency, especially in the food industry where the reduced robustness of cartons and packages demands increased vigilance.

Conveyors for handling goods in shops and warehouses are not uncommon. If improperly fitted and operated they can be very hazardous and the department continued to pay special attention to equipment of this type.

The department gives high priority to the consideration of plans submitted for Building Regulation approval when new premises which will be subject to the Act are to be constructed or existing premises altered. With the very large developments, which are being undertaken in the City centre and elsewhere in the City, the plans are complex and their consideration is time consuming, but ensure compliance with the Act from the start of occupation.

In a commercial centre, for long dominated by multi-storey blocks, lifts are clearly important and during the year the department's work in respect of lift-safety increased. There is a number of escalators in city establishments which are used by the public and staffs and it was noted that the operators were increasingly safety conscious themselves, and are giving safety guidance to users.

Outwork

Notifications of the employment of outworkers in accordance with the requirements of section 133 of the Factories Act, 1961, were received from 95 firms, compared with 192 in 1970.

Details of the different trades are as follows:—

Trade	Outworkers	
	Inside city	Outside city
Clothing	295	283
Tailoring	26	13
Overalls	24	23
Umbrellas	—	—
Gloves	—	—
Quilts	11	2
Travel bags	19	12
Chamois leather	—	23
Handbags	5	2
Household textiles	12	13
Furriers	—	—
Totals	392	371

The names and addresses of those employed outside the City were notified to the appropriate local authorities.

Shops Act, 1950 to 1965

Young Persons (Employment) Acts, 1938 and 1964

The department is responsible for the enforcement of this legislation dealing with assistants' weekly half-holidays, Sunday employment, the employment of young persons and Sunday trading and evening closing.

Complaints from traders and their trade associations continued to be received concerning alleged offences in regard to Sunday trading and evening closing. Following observations by the departments' inspectors, 18 firms were prosecuted for offences in contravention of section 47 of the Shops Acts, 1950 to 1965 in regard to Sunday trading and fines and costs amounting to £646 were imposed. In a number of instances these firms had previous convictions and despite the imposition of the maximum fine, £20, continued to offend. A further 12 firms were cautioned.

Action by the department was necessary in 23 instances in regard to contraventions of section 2 of the Acts relating to the prescribed hour for evening closing. Four firms were prosecuted and fines amounting to £47 imposed. The other cases were dealt with by a caution.

The number of persons, registered on religious grounds, who wished to trade on Sundays up to 2-00 p.m., subject to their shops being closed each Saturday, increased by nine to 254.

Seven certificates were issued, granting conditional exemption from half-day and evening hour closing requirements at exhibitions where retail trading was subsidiary or ancillary to the main purpose of the exhibition.

General Environmental Conditions

Infectious diseases

The number of cases of infectious disease, 1,039, investigated by public health inspectors was the same as in 1970.

Port Health Authorities notified the arrival of 524 persons, compared with 70 in 1970, from countries where smallpox and cholera were endemic, who did not possess valid certificates of vaccination. Each person was visited and kept under surveillance for the prescribed period.

The notified destination addresses of long-stay immigrants continued to be visited for the purpose of informing immigrants of the health services available and, in particular, to advise registration with a general medical practitioner.

Defective drains and sewers

It was necessary to serve 715 notices under the provisions of section 41 of the Manchester Corporation Act, 1950, requiring attention without delay to stopped up drains, private sewers, soilpipes, wastepipes and waterclosets.

At 306 premises the work required was executed by approved contractors, in default of the owners complying with the notice, and at a further 86 premises the owners requested the Corporation to arrange for the work to be carried out.

At 776 premises immediate repairs to public sewers were undertaken on the instructions and under the surveillance of the department, in accordance with the emergency provisions of sections 23 and 24 of the Public Health Act, 1936, (as amended by section 33 of the Manchester Corporation Act, 1946). Defective public sewers at 39 premises were also remedied following the service of notices under section 24 of the Public Health Act, 1936.

The investigation of the condition of drains believed to be defective took place at 286 premises. In each instance where defective drains were found appropriate action was taken to secure their repair. The most common causes of these examinations were rat infestations (138), percolations into basements or sub-floor spaces (65), recurring stoppages in drains (43), suspected defects (17), subsidences (14) and offensive smells (9).

Sanitary accommodation

Action was necessary to deal with the absence or unsatisfactory condition of sanitary accommodation at various types of premises.

At 102 dwelling-houses the department took formal action to secure repairs to sanitary accommodation. The Manchester Corporation (General Powers) Act, 1971, section 35, gave powers to deal with waterclosets needing urgent repair and in the short period that the Act was in force one case was dealt with under this section.

At a further 260 houses, indoor waterclosets were provided with the aid of improvement grants.

Watercloset accommodation was not available at 105 premises, compared with 116 in 1970, either because there was no sewer in the particular vicinity or the premises had a short residual life by reason of contemplated demolition. The arrangements for the emptying of pails, used in lieu, was satisfactory.

Temporary sanitary accommodation for the use of operatives at 35 building sites were inspected. The number of agricultural units where the provisions of the Agricultural (Safety, Health and Welfare Provisions) Act, 1956, were applicable remained unchanged at 19. Inspections revealed no infringements of the statute.

Building plans, submitted, to the Corporation for approval under the Building Regulations, continued to be forwarded to the department for scrutiny and observations in respect of various statutory requirements enforceable by the department, including those relating to sanitary accommodation. Where appropriate, the attention of developers was directed to the requirements of the Chronically Sick and Disabled Persons Act, 1970, with regard to the provision of special watercloset compartments and the need for easy access thereto for disabled persons.

Disposal of refuse

The Director of Cleansing has supplied the following information on the total of 250,053 tons of refuse dealt with by his department which undertakes the municipal collection and disposal of refuse.

		<i>Tons</i>	<i>Percentage</i>
Controlled tipping	.. ..	230,559	93·4
Sales, manufactures, etc.	.. ..	6,000	2·4
Refuse handling plant	.. ..	10,494	4·2
		<hr/>	<hr/>
		250,053	100·0

The Cleansing Department's widely publicised free household collection and disposal service, including dealing with bulky articles such as unwanted furniture and also the disposal of abandoned motor vehicles, remained readily available to the public. Nevertheless, rubbish continued to be dumped on land and in passages, necessitating action by the Health Department to secure its removal.

Surveillance of all sites used for tipping continued.

Additionally, action was required to secure the abatement of nuisances arising from accumulations of offensive matter, frequently deposited in unoccupied premises not secured against unauthorised access."

Rodent control

A total of 7,353 notifications of suspected rodent infestations from different sources was received. The incidence of rat infestations confirmed by investigations was 2,343 and for mice it was 3,970. Whilst infestation by rats was higher than in 1970, not more than 0.5 per cent were serious or major infestations and these were confined to plots of land, particularly riparian sites, where uncontrolled depositing of refuse has taken place, and this is inseparable from nuisance and rat infestation. Increased public awareness rather than more rats was probably another cause for the larger number of complaints, as several occupiers make complaints about the sighting of the same stray rats; this was particularly so in south Manchester where major road-works are in progress. Assistance was given as quickly as possible, usually within 24 hours, after complaints are received. The rodenticides used were those recommended by the Ministry of Agriculture, Fisheries and Food and these proved to be effective in the control of rat infestations; evidence of this was shown by the additional complaints caused by decomposing bodies found in sub-floor cavities and roof spaces, etc.

Control of mice infestation of premises is in many respects more difficult in that their movements are more erratic and they climb well, making use of domestic furnishings; mice have also a higher resistance to anti-coagulant rodenticides.

Domestic premises continued to receive free eradictory service and business premises were charged on a "time-and-material-used" basis. In addition to the treatments, every effort was made to ascertain the sources of infestations, advice was given regarding the rodent proofing of premises, and where necessary detailed examinations of structures and the drainage systems were carried out.

A systematic treatment by Fluorakil and Paranitrophenol of the sewer access chambers was carried out by the City Engineer and Surveyor's Department; 6,885 manholes were dealt with and 611 were found to be rat infested.

Insect pests

Advice from the department continued to be available for dealing with the eradication of household pests, with cockroaches being the more common source of complaint together with the ubiquitous spider beetle and the

ptinidae family, the latter being somewhat confusing to householders, who are relieved when assured that the insects are not as they thought furniture beetles. Assistance was given to householders with regard to the identification and eradication of insect pests, including ptinus tectus, attagenus pellio, bed bugs, psocids, mining bees, dermestidae, centecephalides felis (cat fleas), wasps (including wood wasps) click beetles, garden weevils and anobium punctatum, which is the common furniture beetle.

The entomologist and his assistant at Manchester University were again most helpful with the identification of insects.

Departmental action was required to secure the cleansing of 265 filthy or verminous premises, and the Housing Manager reported that the disin-festation service of the Housing Department dealt with insect infestation at 1,295 municipal houses.

Feral pigeons and other birds

The department dealt with complaints arising from the presence of starlings and pigeons in various parts of the City. There is evidence to suggest that the nuisance damage and annoyance caused by pigeons continues to increase. Information on the elimination of infestations was given to the owners of the properties concerned.

Trapping sites established on selected public buildings were operated, but with limited success.

The effective reduction of pigeon flock density will only be achieved when the feeding of the birds by the public is eliminated or effectively controlled.

The Manchester Corporation (General Powers) Act, 1971, includes powers to deal with unauthorised interference with traps.

The department continued to be licensed by the Ministry of Agriculture, Fisheries and Food to use stupefying baits to take feral pigeons and other birds, although during the year no appropriate occasion arose for the use of such substances.

Offensive trades and effluvium nuisances

In accordance with the provisions of section 107 of the Public Health Act, 1936, the establishment of certain defined "offensive trades" requires approval by the local authority, thereby providing statutory control over the operation of the businesses and supplementing the relevant nuisance provisions of the Public Health Act.

The number of trades registered and in operation at the end of the year remained the same at six and related to the following businesses, rag and bone dealing (2), hides and skins treatment (1), fat extraction (1), oil distillation (1) and rubber substitute manufacturing (1).

A long established business of bone boiler, not subject to registration and frequently the cause of complaint from smells, ceased to trade.

Special surveillance continued where complaints of offensive emissions intermittently occurred in an area of the City containing mixed industrial and older residential property. In this district there are two offensive trades in addition to other chemical processes, at different factories, registered under the Alkali etc. Works Regulations Act, 1906.

Eleven works in the City are registered under this Act, and liaison with H.M. Alkali and Clean Air Inspectorate is maintained. This inspectorate, founded in 1863, is responsible to the Department of the Environment.

Noise nuisance

An increasing awareness of noise and the unwillingness of the public to tolerate it is evident from the 211 complaints dealt with by health inspectors, compared with 99 and 51, five and ten years ago respectively.

The sources of noise nuisance complaints, i.e. industrial, domestic, building operations and traffic noise, remained in much the same proportion as in previous years.

Most complaints were dealt with informally, but it was necessary to serve statutory notices in five cases concerned with the operation of sewing machines, machinery used in demolition work and an extractor fan system. In the two other instances, concerned with the use of amplifying equipment to attract customers to "trendy" men's outfitters, the Public Health (Recurring Nuisances) Act, 1969, was also invoked.

The persons responsible for the operation of the sewing machines failed to comply with the notice and legal proceedings were instituted. At the date of the Court hearing the nuisance had been abated and the summons was withdrawn on payment of £5 costs.

Noise and vibration arising from the use of a launderette in shop premises adjoining a dwelling-house occupied an appreciable amount of inspectorial time and consultants services were used. Whilst some work was done to abate the nuisance the complaint has not yet been finally resolved.

Complaints arising from the activities of a distribution depot, with mechanical handling plant, where work is carried on during the night required inspectors to spend a considerable amount of time, both late at night and in the early hours of the morning, to ascertain the level of noise in nearby dwelling-houses. As a direct result of these observations a Town Planning appeal, by the owners and heard by the Minister's inspector, against an objection to extend the premises was rejected and the Corporation's decision to refuse the extension was upheld.

The operation of a fume extract fan system at industrial premises in close proximity to dwelling-houses was not resolved until after the service of a statutory notice.

Generally, managements make every effort to keep noise to a minimum, but employees sometimes by their thoughtless actions, especially after normal hours of work, cause needless annoyance and distress to local residents.

These cases are typical of what happens when industrial and residential properties are intermingled and emphasises the importance of town planning control to secure the proper siting of industrial and commercial activities in relation to the use of land for residential purposes. This, however, is a measure which can only be effective in the long-term.

Meanwhile, it is rarely possible to eliminate the noise complained of completely and all the department can reasonably do is to ameliorate the conditions by requiring the abatement of the worst aspects of the nuisance. This often leaves complainants dissatisfied, even though legally there is no further basis for action; in this connection radical new measures to combat neighbourhood noise were called for by a Working Group of the Noise Advisory Council, led by Sir Hilary Scott, a former president of the Law Society.

There can be no doubt, the report of the Working Group stated, that the work of the local authorities, within the framework of the Noise Abatement Act, has, over the past eleven years, resulted in the expenditure of millions of pounds in bringing much-needed relief to thousands of people. But it is clear that much more remains to be done and that certain features of the present law inhibit the local authorities from doing it.

The report, which covered a great variety of sources of neighbourhood noise, including factories, demolition, construction and road works—but not aircraft or traffic noise—called for a completely new system of noise abatement zones, within which specific limits could be imposed on noise emission from premises so as to bring about a progressive improvement in the local noise climate.

The Working Group also proposed the stricter use of planning and licensing controls to prevent new sources of disturbance arising, and an overhaul of the present procedures for noise abatement to make them quicker in operation and more effective. They proposed that the exemption of public utilities and other statutory undertakers should cease and that there should be a tenfold increase in the maximum penalties for noise offences.

Noise complaints as a consequence of large scale building operations and road construction continue to arise and with one exception were dealt with informally. These complaints stem from a failure to plan operations so that noise levels are kept to the minimum or to follow the guidance given in the Ministry of the Environments advisory leaflet No. 72 "Noise Control on Building Sites".

Recommendations made by consultants, appointed by the Airport Committee, to investigate noise from aircraft using Manchester Airport are being implemented.

The Manchester Corporation (General Powers) Act 1971 included new control provisions relating to noise and also provided for a scheme to aid the sound insulation of dwellings near the airport.

Land used by pleasure fairs

Ten pleasure fairs were held in the City on land approved by the Corporation in agreement with the Showmen's Guild. In one instance, temporary sanitary accommodation and lighting was unsatisfactory and action had to be taken to secure compliance with the terms of the agreement.

In some cases attention had to be directed to the relevant requirements of the Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations, 1966.

The department reported adversely on an application to use land in Collyhurst as a site for a pleasure fair, on the grounds of the probability of the creation of a noise nuisance.

The provision of temporary winter quarters for Showmen was approved. After first occupation of the site, some modifications were required and subsequently the site was conducted so as to comply with the temporary standard agreed with the department.

The possibility of a permanent winter site is still under consideration.

Rag flock and other filling materials

Twenty-three premises, compared with 27 in 1970, were registered under the Rag Flock and Other Filling Materials Acts, 1961, and subsequent regulations for the use of designated filling materials in the manufacture of upholstery (11), quilts (9), bedding (2), and pillows (1). The reduction was due to one firm moving out of Manchester and three ceasing to trade.

No rag flock is manufactured in the City, but three premises were licensed for the storage of rag flock prior to distribution to manufacturers.

Twenty-five visits were made regarding the enforcement of the Act, twenty-two to registered premises, and three to licensed premises. Sixteen samples of designated filling materials were obtained and submitted to the prescribed analyst for examination. These samples comprised cotton felt (6), rag flock (4), woollen mixture felt (3), feathers (2) and hair (1); they were found to satisfy the relevant standards contained in the Rag Flock and Other Filling Materials Regulations 1961/65 and 1971.

The 1971 Regulations came into operation on the 3rd November, 1971, and supersede, consolidate and amend the 1961 and 1965 Regulations. The principal changes from the previous regulations are the prescription of additional filling materials as materials to which the Act applies and the designation of additional analysts.

Consumer Protection Act, 1961

Nightdresses (Safety) Regulations, 1967

The provisions of the Consumer Protection Act, 1961, require that no person shall sell, or have in his possession for sale, any prescribed class of goods, not complying with the regulations made to prevent or reduce risk of personal injury or death.

Visits were continued to shops and market stalls, to ensure observance of the regulations. It is evident that local traders are familiar with the safety requirements. There was however, an instance whereby an immigrant manufacturer supplied nylon nightdresses made by an immigrant outworker using cotton thread. One of these nightdresses was purchased by an officer of another local authority and it failed the prescribed test for low flammability. The garment had also been sold by the wholesaler to the retailer without an appropriate warning label.

The manufacturer took back the consignment to insert the warning labels, and agreed to use, in future, only nylon thread when manufacturing ladies' nylon nightdresses.

Toys (Safety) Regulations, 1967

These prohibit the sale of toys (other than table tennis balls) made of cellulose nitrate, which is dangerously inflammable, and also prescribe a maximum permissible amount of lead in any paint used on toys.

Apart from the considerable home production of children's toys, consignments are imported from Austria, Australia, Greece, Hong Kong, Israel, Japan, Sweden and West Germany.

No formal action was necessary to enforce the regulations.

The Electric Blankets (Safety) Regulations, 1971

These Regulations which were made on the 1st December, 1971, and effective from the 1st January, 1972, impose requirements in respect of electric blankets for household use to prevent or reduce the risk of death or personal injury.

Regulation 3 requires electric blankets, which do not bear the appropriate certification mark, to comply with certain of the requirements of the relevant British Standard. Regulation 4 and the Schedule specify the information and warnings to be marked, in all cases, on the blanket itself, and Regulation 5, which comes into operation on 1st September, 1972, specifies the information to be given on the box in which the blanket is packed.

Export of second-hand clothing

As a public health measure, and to comply with the import requirements of certain overseas countries, 86 articles of second-hand clothing were disinfected and certified by the department. In addition, nine bales of second-hand clothing were disinfected for the Bangla Desh Association in Lancashire before dispatch overseas for relief work.

Swimming baths

Twenty-seven municipal swimming baths and 20 baths at colleges, schools or privately owned establishments use the City's mains water supply and are provided with filtration systems affording a turn-over cycle of four hours or less, dependent upon the numbers of bathers.

All the swimming baths were visited whilst in use and bath-side tests were carried out by a public health inspector to determine both alkalinity and chlorine content.

Bacteriological samples of swimming bath waters were examined at the Public Health Laboratory and five gave unsatisfactory results. Immediate attention to chemical composition and filtration, together with the correct chlorine dosing, resulted in repeat samples complying with recommended standards.

Bacteriological examination of water samples taken from a childrens play pool, created in the basin of a disused canal, were not satisfactory and surveillance continued to be necessary.

Hairdressers and barbers

Section 42 of the Manchester Corporation Act, 1946, requires the registration of hairdressers, barbers and their premises, and the cleanliness of the premises, equipment and persons employed is subject to byelaws made under the Act. Similar provisions have been enacted under the Public Health Act, 1961. Power to extend the byelaws was incorporated in the Manchester Corporation (General Powers) Act, 1971.

Six hundred and eighty hairdressers are now registered with the Corporation. No formal proceedings were necessary to secure observance of the byelaws and verbal cautions sufficed in 12 instances to remedy short comings of a minor nature.

Establishments for massage or special treatment

Annual licences as required by the provisions of the Manchester Corporation Act, 1924, Part IX, and Byelaws, were issued in respect of 53 establishments offering the following treatments: chiropody, massage, physiotherapy, osteopathy, sun-ray, low frequency electrical, Turkish and sauna baths.

New licences were issued for four establishments giving treatments for chiropdy, massage and chiropody, massage electrical and sauna bath, sauna bath and sun-ray.

An appeal to the Magistrates' Court against refusal of the Corporation to grant an applicant a licence for an establishment giving sauna massage and electrical treatments was successful. The Corporation did not regard the premises as being satisfactory. Although the property is due for early re-development the Magistrates considered the premises to be adequate and allowed the appeal.

One licence in respect of a Turkish bath establishment was revoked on the grounds that the premises were improperly conducted.

Sale of certain poisons

Persons retailing poisons, scheduled in Part II of the Poisons Rules Order, 1968, have to be licensed by the local authority and have to comply with requirements as to labelling, packaging, storage of poisonous substances and, in some instances, the keeping of records.

The particular poisons are mainly contained in proprietary domestic disinfectants or horticultural products. The number of persons listed with the department was 389, compared with 452 in previous year.

Eleven firms were formally cautioned by the Health Committee for breach of the requirements of the Regulations.

Burial grounds and exhumations

The remains of 3,422 persons were exhumed from a further portion of the disused burial ground adjoining Withington Hospital at Nell Lane, West Didsbury, and reinterred at the Southern Cemetery in accordance with Part IV of the Manchester Corporation Act, 1967. Originally, the burial ground was consecrated for the Poor Law Commissioners in 1856, and the burial registers record interments from 1857 to 1923. All the work entailed with this mass exhumation and re-interment of remains was carried under the day-to-day supervision of the public health inspectorate. Upon completion, a detailed report was sent to the Registrar General as required by the Act. These exhumations were required as the land formed part of the site of a major road improvement scheme.

Work on conversion of the disused Newton Heath cemetery to a juvenile playing field with both hockey and football pitches has now been completed, and the playing field is enclosed with substantial concrete fencing.

Twelve exhumations were attended by public health inspectors in accordance with Home Office Licences issued under section 25 of the Burial Act, 1857. In five instances, re-interment took place within the same cemeteries. The remains of three persons were cremated at the request of relatives and four transported overseas.

Supervision also ensured compliance with requirements in connection with the transportation overseas of the remains of four other persons.

Public conveniences

Restrictions on capital expenditure precluded the provision of new conveniences.

Conveniences for both sexes in part of the central area of the City were repositioned to permit major redevelopment. Prefabricated portable structures were provided so that they could be used elsewhere when permanent facilities become available in that sector of the city centre.

The incidence of vandalism increased despite an intensive publicity campaign inviting public co-operation in its prevention. Apart from the needless increase in maintenance costs, this anti-social behaviour seriously affected the standard of service the Department wished to provide.

Recruitment of suitable labour remained difficult, mainly because of the unattractive nature of the work, which also involves shift and weekend working. A work measurement exercise and investigation of methods was undertaken by a Management Services Work Study Team, and proposals, recommending a 10 to 15 per cent incentive bonus for a higher degree of performance by attendants and cleaners, were submitted to the Trade Union concerned in December.

In the selection of sites for new conveniences, various factors influence the decision and the provision of vehicle parking facilities is now of considerable importance. Conveniences exist on most of the major roads in the city, but traffic parking restrictions in many cases limit their availability. The Highways Act, 1971, recognises this difficulty and contains various sections directed to the provision of public sanitary conveniences, parking spaces and lorry areas in the vicinity of highways.

Liaison continued with the City Planning Department to ensure that, in areas of the city which are being redeveloped, sites will be available for the erection of public conveniences when required.

The number of public conveniences is now as follows :—

				<i>Men</i>	<i>Women</i>	<i>Total</i>
Conveniences	..	..	..	64	60	124
Urinals only	..	..	..	38	—	38
						<hr/>
						164
						<hr/>

Free hand washing facilities are provided at all conveniences, and in the central area of the city, on payment of a charge of 2½p, a “wash and brush-up” service is also available.

Generally, conveniences are open at all times.

Sewerage and Sewage Disposal

Sewerage

The City Engineer and Surveyor who is responsible for the provision and maintenance of the sewerage system of the City has supplied the following information:—

“The final section of Main Drainage Work 6, which will relieve pollution and flooding in the Openshaw and Bradford Districts of the City is now under construction. Work is progressing well and the contract should be completed to schedule.

Charlestown Road connecting sewer has been completed thus preventing the continued pollution of the Boggart Hole Brook. The resewering of the Scotland Hall Road/Briscoe Lane area is almost complete and should ultimately prevent flooding which at present occurs in this area.

Construction is underway on a new sewer to drain an isolated district of the City, Heyhead, which at present relies on septic tank and pail closets. Work should be completed in Summer 1972.

Reconstructions of storm water overflows which at present work ineffectually are being carried out. In particular those at Ardwick Green, Moston Lane East and Moston Bottoms.

Two major culverting schemes are expected to commence construction in summer, 1972, viz Moston Brook and Platt Brook. Both these schemes involve the improvement of the associated sewerage system and this should relieve the pollution of the watercourses.”

Sewage, treatment and disposal

The Director of the Rivers Department which undertakes the treatment and disposal of sewage including a large volume of trade effluent, from the City and certain adjacent districts, has supplied the following information:—

“The main sewage treatment plant for Greater Manchester is at Davyhulme, in the Urban District of Urmston. This works deals with sewage and industrial

effluents from a population of approximately 800,000 from 14 local authorities. The smaller obsolescent works at Withington was closed early in 1971 and the flow diverted to Davyhulme for treatment.

The last major extensions to the Davyhulme Works were completed in 1966, but the pollutorial loading, particularly from industry, has so increased that further extensions are nearly completed to double the oxidation capacity of the works, in addition to ancillary sedimentation and sludge consolidation tanks.

The increased quantities of sewage sludge produced from the extended plant are to be conveyed to sea in a new 3,000-ton vessel, m.v. "Gilbert J. Fowler", commissioned at the end of 1971, to supplement the Rivers Department's existing ships, m.v.'s "Mancunian" and "Percy Dawson".

The Department of the Environment has encouraged the formation of a Consortium of Local Authorities for sludge disposal in the area. The prime members of the Consortium are the County Boroughs of Manchester, Salford, Liverpool, St. Helens, Wigan, Stockport, Oldham, Bury, Rochdale, Warrington, and also the Bolton and District Joint Sewage Board.

The Consortium has commissioned a feasibility study into the provision of a pipeline to convey sludge from the Consortium area to the Mersey Estuary for subsequent shipping to sea. In the meantime, Manchester ships, using the Ship Canal, are conveying sludge transported by road from Bury, Oldham and Rochdale to Manchester Sewage Works.

It is likely that the Bolton and District Joint Sewage Board, together with some smaller authorities, will also take advantage of this facility in 1972".

Appendix

Manchester Corporation (General Powers) Act, 1971

This Act received the Royal Assent on 5th August, 1971 and the Council referred the following functions to the Environmental Health Services division of the department:—

Part IV—Public Health

Carrying or storage of waste food

Section 33 makes it an offence punishable by a fine not exceeding £20 for any person in any street or public place to carry waste food by way of trade otherwise than in a suitably covered container and for any person to deliver by way of trade to any premises in the City for use for the storage of waste food, a sack or other container which is not clean or is in an offensive condition.

Closure of insanitary food premises and stalls

Section 34 empowers a Magistrates' Court, on complaint by the Medical Officer of Health or the Chief Public Health Inspector, to prohibit by order the storage, sale, or offer or exposure for sale of open food for human consumption at premises used for that purpose which are insanitary or in a

defective condition so that they would contravene the Food Hygiene Regulations made under section 13 of the Food and Drugs Act, 1955, and would be dangerous to health until the conditions are remedied. Where a complaint is made under this section, a single Justice sitting as a Magistrates' Court may make an interim order closing the food premises until the full hearing. If an interim order has been made and the Court on determining the complaint consider that the conditions existing were not such as to justify the making of an interim order, the Corporation may be ordered to pay compensation to the person carrying on the food business at the premises which were closed. Any person contravening an order or interim order made under this section is liable to a fine not exceeding £100. The Court may withdraw an order or interim order where the Medical Officer of Health or the Chief Public Health Inspector certify that the state of the premises has been remedied. There is a right of appeal against the refusal or failure of the Medical Officer of Health or Chief Public Health Inspector to give such a certificate.

Repair of water closets

Section 35 amends section 41 of the Manchester Corporation Act, 1950, to extend the Corporation's summary power to repair water closets which are stopped up to include water closets or their fittings which are so defective as to be in need of urgent repair.

Silencers for internal combustion engines

Section 36 provides that a stationary internal combustion engine shall not be used in the City unless an effectual silencer is provided and used on the exhaust of the engine. If a person continues to use such an engine in contravention of this section after the lapse of a reasonable time after a notice has been served on him by the Corporation to remedy the complaint he will be liable to a fine not exceeding £50 and to daily fine not exceeding £5.

Reduction of noise from use of air powered tools and compressors

Section 37 makes it an offence punishable by a fine not exceeding £50 and a daily fine not exceeding £5 for any person to use or cause to be used any air powered tool or mobile air compressor unless it is equipped with effective means for reducing the noise emitted. It is a defence to show that the best practicable means have been employed to reduce the noise emitted.

Control of noise from building, demolition and road works

Section 38 authorises the Corporation, where the Medical Officer of Health or a Public Health Inspector are of the opinion that the emission of noise or vibration is or is likely to be a nuisance, to serve a notice on any person having control of building, demolition or road works which are being or are intended to be carried out imposing requirements as to the manner in which they are to be carried out, prohibiting the use of specified machinery or plant, or regulating the hours during which any operation or machinery may be carried out or used, for the purpose of preventing, controlling or mitigating noise or vibration. If such a notice is not complied with within 48 hours of the service of the notice or the commencement of works the Corporation may apply to a Magistrates' Court for the suspension of the works until the requirements necessary to prevent the noise or vibration from being a nuisance are complied with. If the Medical Officer of Health or a Public Health Inspector

considers that the emission of noise or vibration from road works or any engineering or building operations is a nuisance the Medical Officer of Health may apply to a Justice of the Peace who after an inspection may make an interim order suspending the works until a Magistrates' Court has determined what requirements should be imposed to prevent, control or mitigate the noise.

Any person contravening an order made after the service of a notice is liable to a fine not exceeding £200 and to a daily fine not exceeding £20 and any person who contravenes an interim order will, if a Magistrates' Court determine that noise mitigating requirements should be imposed, be liable to similar penalties. It is a defence to show that the best practicable means of mitigating any nuisance have been employed. The powers of the Corporation under this section may be exercised by the Medical Officer of Health, and before they or he exercise their powers the Medical Officer of Health shall consult a person having special knowledge of engineering, building, demolition or road works, as to the precautions which might reasonably be taken.

Reduction of dust, etc. from building operations

Section 39 makes it an offence for any person to carry out in the City any engineering or building operations including works of demolition or cleansing of buildings or structures unless he takes such precautions as are reasonably adequate to reduce by as much as the best practicable means will allow the amount of dust which may be blown or deposited on to a street or on property in the vicinity of the works and provides an expedited procedure, compared with the procedure in the Public Health Act, to obtain an order of a Magistrates' Court to abate such a nuisance.

Provisions as to self operated laundries

Section 40 provides that after the appointed day, occupiers of launderette premises will be required to have their premises inspected at least once every 14 months by a competent engineer appointed by an insurance company or agreed by the Corporation and to send a certificate to the Medical Officer of Health certifying that the plant and machinery are so fitted and maintained as to avoid risks of danger to the public. If no certificate is sent, the Corporation may apply to a Magistrates' Court for an order closing the premises until a certificate is received. Anyone contravening such an order will be liable to a fine not exceeding £50 and to a daily fine not exceeding £5.

Further, if in the opinion of the Medical Officer of Health or a Public Health Inspector, dangerous dry cleaning substances are used on launderette premises, the occupier of the premises may be required to display precautionary notices. Failure to display a notice when required renders a person liable to a fine not exceeding £20 and to a daily fine not exceeding £5.

Definition of "Inhabitant" in Act of 1936

For the removal of doubt, section 41 extends the definition of "inhabitant" in that part of the Public Health Act, 1936, which deals with statutory nuisances to include persons who work within the neighbourhood as well as those who live there.

Trees impeding access of natural light to houses, shops and offices

Section 42 provides that a tree or shrub which impedes or excludes the access of natural light to a dwelling house, shop or office premises to such an extent as to be prejudicial to the health of or a nuisance to the occupiers shall be a statutory nuisance for the purpose of Part III of the Public Health Act, 1936. The Corporation can use the summary procedure in the 1936 Act to require the abatement of such a nuisance.

Part VII—Miscellaneous

Application of certain enactments to vessels and floating structures

Section 56 makes vessels which are permanently moored and not used for navigation subject to the provisions of section 34 (Closure of insanitary food premises and stalls) and Part V (Night Cafes) of this Act and to the provisions of the Public Health Acts, 1936 and 1961, specified in schedule 1, which relate largely to sanitary arrangements and statutory nuisances.

Prohibition of interference with bird traps

Section 62 makes it unlawful for anyone other than an authorised person to interfere with bird traps or bait set by the Corporation. Contravention renders a person liable to a fine not exceeding £5.

Hairdressers and barbers

Section 63 repeals and re-enacts with modifications the provisions of section 42 of the Manchester Corporation Act, 1946, relating to the registration of hairdressers and barbers with effect from a day to be appointed under section 69 of this Act. Both hairdressers and their premises must be registered. Registration on the appointed day under the 1946 Act will count as registration under this Act.

The section amends the purposes for which byelaws may be made under Section 77 of the Public Health Act, 1961, to include:—

- (a) the safety of the instruments, materials and equipment used in a hairdresser's or barber's shop;
- (b) the provision of adequate washing facilities, including hot and cold water, wash basins and other appliances; and
- (c) the safe use of dyes and other chemicals.

The byelaws made under the 1946 local Act will remain in force until new byelaws are made under the Public Health Act, 1961, as amended by this section.

A contravention of the provisions of this section or byelaws made under the amended section 77 of the Public Health Act, 1961, renders a person liable to a fine not exceeding £20 and a maximum daily fine of £5.

Authorised officers of the Corporation are given powers to enter premises, and refusing to permit such an officer to enter premises which are reasonably suspected to be used for hairdressing renders a person liable to a maximum fine of £25.

REPORT OF THE PUBLIC ANALYST

J. B. Aldred, M.A., M.Chem.A., F.R.I.C.

Plans for the construction of a new laboratory have been mentioned in earlier issues of this report. Building started at a site in Hulme during 1970 and the laboratory was practically ready for occupation by the end of 1971. It will be the first purpose-built Public Analyst's Laboratory that the City has had since the appointment of its first Public Analyst 100 years ago. Although various bodies had tested a number of different commodities probably for many centuries, it was not until 1872 that local authorities of over a certain size were required by Act of Parliament to appoint one or more Public Analysts. Initially it was the general practice to appoint consultants who received their remuneration on a fee per sample basis, although as time went by a number of authorities opened their own laboratories and now practically all the largest cities employ full time salaried Public Analysts together with a full scientific staff.

The first salaried Public Analyst of Manchester was appointed in 1920. He worked in laboratories which were situated in the Department of Bacteriology at the University, his time being divided between university lecturing and his duties as Public Analyst, although the remainder of his staff worked entirely for the City. His successor was appointed in 1949 and was the first holder of the post to devote the whole of his time to his duties as Public Analyst. At about the same time the laboratory moved out of the University into a converted house nearby. These premises soon proved inadequate and a number of years were spent trying to find alternative accommodation until it was decided to erect a purpose built laboratory. Unfortunately, delays outside the control of the Health Department necessitated a move in 1965 into temporary accommodation in two disused wards at Monsall Hospital, to permit the demolition of the previous laboratory. The division of the equipment between two buildings at opposite corners of the hospital grounds has made efficient working of the laboratory extremely difficult over the past few years, it being frequently necessary to use the facilities of both buildings in the analysis of a single sample.

The period, since 1920, during which the Corporation have employed their own laboratory staff has seen a complete revolution in the food manufacturing industry as well as in the techniques of agriculture and horticulture. For example, 1925 saw the introduction for the first time of regulations governing the addition of preservatives and artificial colouring matters to food, although these only laid down quantitative requirements for two preservatives and prohibited the use of five particularly toxic colours. Today regulations control the use of 11 preservatives and prohibit the use of all synthetic colours except the 24 on the permitted list, the majority of which have detailed specifications of purity. Advances in food technology and scientific knowledge in general have lead to the introduction of regulations

covering a host of trace constituents of food from additives such as emulsifying agents, vitamins in flour and antioxidants in fats and oils, to the contaminants lead and arsenic, which can gain access to food from a variety of sources.

More recently still, the advent of the almost universal use of agricultural chemicals, such as insecticides, fungicides and weedkillers, coupled with the widespread public concern of possible effects from their residues in food-stuffs, has presented analysts with problems which a decade ago had not even been imagined. These chemicals now number several hundreds and it is necessary not only to detect but measure and identify traces of them that in many cases are present in quantities too small to be seen by the naked eye.

Alongside this work on trace constituents the laboratory has a continuous programme of work examining food for general composition. Thus milk is examined for the presence of added water and the abstraction of fat and a wide range of manufactured foods are analysed to ascertain that the quantities of the various ingredients used are correct. Foremost amongst these are the various meat products, both canned and otherwise, for which standards of meat content are laid down by regulations. Historically the adulteration of milk is a problem that has always been with public analysts but the majority of regulations governing the composition of manufactured foods are more recent. Some originated with the food shortages caused by the second world war but many have been introduced since.

That there is still a need for analytical control over the composition of food is shown by a glance at the following pages of this report. Of 37 samples of milk containing added water, 12 represented bottles on retail sale and 11 per cent of all meat products examined showed deficiencies in meat content. This is not to say that the dairies and manufacturers of meat products are engaged in widespread deliberate fraud. On the contrary the majority are putting on the market perfectly acceptable products. On the other hand, the figures show that faults at the dairy coupled with the occasional admixture of watered farm milk with the main bulk, lead to detectable levels of adulteration on numerous occasions. They also show that too many manufacturers are putting in their products the bare minimum amount of meat with the result that slight errors in mixing are resulting in deficiencies. Although a number of instances of gross adulteration were recorded during the year, many of the offences were trivial in themselves and certainly did not make headline news. However, when multiplied up by the total amount of food consumed the amount of money involved is quite astonishing. In 1970, the last year for which figures are available, household food expenditure in this country exceeded 6,300 million pounds, making this item by far the greatest item of personal expenditure, as it exceeded the next most expensive item, housing, by over 50 per cent. The consumer would do better to achieve, say, five per cent better value for money on food, than 20 per cent or more on most other items, and it is deficiencies of this order that are frequently found.

Another aspect of the work of the laboratory is the comparison of the nature and composition of foods with any claims or statements made on the labels. Most people who are conscious of their rights as consumers are familiar with the existence of the Trade Descriptions Act, 1968, and it is clear from enquiries received from members of the public that many of them

assume food labelling is covered by this Act. Whilst food labelling offences could be dealt with in this way, the public have had equivalent protection where food is concerned, for a number of years before this Act came into force. The Labelling of Food Order 1953 lays down detailed requirements on food labelling and more general points are covered by the Food and Drugs Act, 1955. In addition many regulations concerning individual foods lay down specific labelling provisions. The legislation covering food labelling is thus of relatively long standing and possibly its importance in the public mind has been displaced by the publicity given to the Trade Descriptions Act, 1968.

Over recent years the changes concerning drug analysis have been if anything more dramatic than those concerned with food. The current edition of the British Pharmacopoeia contains over 1,200 monographs the majority of which are synthetic drugs introduced within the living memory of a fair proportion of the population and in many instances methods of analysis employing sophisticated equipment are laid down. The Medicines Act, 1968, makes provision for changes in the administration of the control of the quality of drugs but at the time of writing these provisions have not been brought into effect and no laboratories have been designated to carry out the analytical work. Should this laboratory be so designated it will be well equipped in the new premises to carry out the work required of it.

In order that the control of the sale of food and drugs shall be effective, it is necessary for the analyst not only to be a scientist and have a knowledge of the law, he must also be aware of the views of the public and have a detailed knowledge of methods of food and drug production and manufacture. To this end contact with lay organisations is welcome and discussion takes place between the laboratory staff and representatives of industry whenever possible. The laboratory is fortunate in having on its present staff analysts who have held senior positions in the food and pharmaceutical industries and in agricultural establishments.

In addition to the above work the Public Analyst is also Agricultural Analyst of the City, samples of fertilisers and animal feeding stuffs being analysed for compliance with the requirements of the Fertilisers and Feeding Stuffs Act, 1926. Measurements of atmospheric pollution are made for the Health Department and this year the work was extended to include some preliminary work on the deposition of grit. The laboratory also serves the Port Health Authority and facilities for the testing of samples are available to other departments of the Corporation. Samples examined include materials purchased by Corporation Departments and articles submitted by the Weights and Measures Department under the Trade Descriptions Act, 1968. Details of some of these and other samples are recorded in the following pages of this report.

Finally, thanks are due to the Food and other Inspectors for their continued co-operation, also to the Health Committee for the provision of the new laboratory, which will make the Manchester Public Analyst's Laboratory one of the best in the country and should put the City in the forefront of consumer protection work.

Samples examined in the laboratory

Health Department:—

Food and Drugs Act, 1955—Inspectors samples ..	2,262
—Samples associated with complaints ..	24
—Samples associated with School Meals Service complaints ..	8
Atmospheric Pollution:	
Daily smoke and sulphur dioxide	2,032
Deposit gauges	33
Grit surveys	104
Waters:	
Routine and complaint samples	36
Others	11
Miscellaneous	123
Direct Works Department:	
Contract samples	3
Education Department:	
Contract samples	8
Parks Department:	
Fertilisers and Feeding Stuffs Act, 1926	104
Waters	5
Weights and Measures Department:	
Trade Descriptions Act, 1968	9
Port Health Authority:	
Food samples	68
Waters	5
Miscellaneous samples	11

Food and drugs adulteration

Food and Drugs Act, 1955

Summary of food and drug samples showing adulteration or other irregularity

Article	Number unsatisfactory
Biscuits	3
Blackcurrant health drink	1
Cough preparations	2
Fish (canned)	2
Flour, plain	1
Fruit (canned)	2
Kelp tablets	2
Low fat spread	1
Meat products:	
canned products	16
meat pie	2
sausage	6
Milk	41
Pickles and chutney	8
Ready meal (dried)	1
Soft drink	4
Soup (dried)	1
Vitamin and mineral tablets	2
Total unsatisfactory samples	95

Composition of milk

The average values for the percentages of fat and non-fatty solids in all milks free from added water are set out below :—

	Milk samples other than Channel Islands			Channel Islands Milk samples		
	No.	Fat per cent	Non-fatty solids per cent	No.	Fat per cent	Non-fatty solids per cent
First quarter	125	3.58	8.53	25	4.54	8.89
Second quarter.. .. .	148	3.49	8.69	16	4.33	9.01
Third quarter	129	3.63	8.70	14	4.48	8.99
Fourth quarter	139	3.75	8.71	12	4.75	8.96
Average for year	541	3.61	8.66	67	4.51	8.95

Adulteration of milk

Sampling of milk continued at a similar rate to previous years. Out of a total of 576 samples of ordinary milk and 69 samples of Channel Islands milk 35 samples of ordinary milk and two samples of Channel Islands milk were found to contain added water. Included in these were 12 samples of bottled milk obtained on retail sale but in no instance was the amount of water very large. It was thought that in all cases the presence of added water was due to added water in the milk delivered to the dairies. Investigations were carried out by the inspectors in an attempt to trace which farm milks were represented in each retail sample which was the subject of adverse report, and in more than one instance it was possible to identify the offending farmer. Added water was found in six consignments of farm milk and prosecutions were instituted where appropriate. The worst instance of watering encountered during the year involved a consignment of 13 churns, nine of which contained added water. The amount of water present in the adulterated churns varied between one and 49 per cent with an overall average for the consignment of 10 per cent of added water.

The fat content of milk is governed by the Sale of Milk Regulations, 1939, which lay down a presumptive minimum of three per cent of fat, although it is permissible to sell milk with a lower fat content if it can be shown to be of the same composition as given by the cow. On this basis, five samples were reported to have very slight deficiencies in fat which could not be accounted for by the presence of added water. Channel Islands milk is subject to an absolute minimum of 4 per cent of fat and two samples were the subject of adverse report. In one of these the deficiency was 9 per cent but a repeat sample was satisfactory.

The Sale of Milk Regulations, 1939 also lay down a presumptive minimum of 8.5 per cent of non-fatty solids in milk below which the addition of water is assumed. Fifty four samples of ordinary milk were found to be deficient in non-fatty solids but shown to be free from added water by the Hortvet freezing point test. The proportion of genuine milks of inferior quality was very similar to last year and the average composition of all samples was also practically identical.

Samples of raw milk are tested, as a matter of routine, for presence of penicillin and other antibiotics which may have been used in the treatment of mastitis in cows. No instance was recorded of the presence of residues of antibiotics in milk.

Samples other than milk

Some notes on cases of adulteration or irregularity

Colouring matter in food. The Colouring Matter in Food (Amendment) Regulations 1970 came into operation on the 1st of January. These Regulations removed from the permitted list the artificial colour ponceau MX. During the year two samples, both of canned strawberries, were found to contain this colouring matter. The Amendment Regulations were only made on the 24th of July 1970 and in consequence all the strawberries canned during the 1970 season would have been processed before the content of the Regulations was known. It would therefore appear that the Ministry of Agriculture, Fisheries and Food had allowed insufficient time between the making of the Regulations and their coming into operation.

Labelling offences. The number of labelling offences recorded during the year was somewhat lower than during the previous year. The purpose of the Labelling Regulations is to ensure that the purchaser can see at a glance precisely what he is buying. This is particularly important now that a very large proportion of all foods are purchased pre-packed from supermarkets. A detailed list of ingredients is also required to enable the discerning purchaser to find out not only what the article is but precisely what it is made of. There is a tendency amongst some designers of labels to either omit or give less prominence to some of the more unattractive ingredients. For example a sample of dried spring vegetable soup mix bore a list of ingredients which was substantially a fairly lengthy list of vegetables with seasoning, whereas in fact the major ingredient of the mix was starch which was not mentioned at all on the packet.

It is necessary to state on the label whether the contents of the packet contain the product named or whether it is a mix from which this product can be prepared. If it is the latter then it is necessary to state whether the mix is complete or whether other ingredients are required. A sample coming in this category was labelled "paella" but the packet in fact contained an incomplete mix from which paella could be made after the addition of butter.

Pickles, eight samples in all, were the subject of adverse reports for various minor labelling offences involving either incomplete list of ingredients or mis-description of the products. A sample of canned mussels made no mention of the presence of oil, vinegar, herbs and spices on the label. Three samples of biscuits also had incomplete lists of ingredients.

Low fat spread. This product comes under the general heading of slimming foods. These take various forms, for example starchy foods are sometimes produced with an increased protein content thus presumably enabling the purchaser to consume the correct amount of protein whilst at the same time eating a smaller total amount of food. In other instances the food may contain ingredients with no nutritive value so that the purchaser can eat the same amount of food as he has always eaten but at the same time reduce his calorie intake. A sample of low fat spread was found to contain the essential ingredients of margarine except that the fat content was only one half that of genuine margarine. In this instance the ingredient with no nutritive value which had been added was water. It was held that this product was margarine as defined by the Margarine Regulations 1967 which protect the purchaser by laying down a maximum water content. The precise legal position with regard to products of this nature appears uncertain at the moment but the matter has been drawn to the attention of the Ministry of Agriculture, Fisheries and Food and discussions have taken place with Ministry officials.

Meat products. Apart from milk samples, meat products were responsible for the greatest number of unsatisfactory samples. Standards for meat content are laid down for the majority of meat products, both canned and otherwise, and a table is given below listing the majority of occurrences during the year when samples failed to reach the minimum legal standards.

Deficiency in Meat

Canned stewed steak in gravy	12 per cent
Canned stewed steak in gravy	7 per cent
Canned stewed steak in gravy	9 per cent
Canned stewed steak in gravy	9 per cent
Canned pork luncheon meat	5 per cent
Canned minced beef with gravy	8 per cent
Canned minced beef with onions and gravy ..	4 per cent
Canned steak and kidney pie	28 per cent
Canned Frankfurter sausages in brine	13 per cent
Canned Frankfurter sausages in brine	7 per cent
Canned Frankfurter sausages in brine	8 per cent
Pork sausages	28 per cent
Pork sausages	15 per cent
Steak pies	64 per cent
Steak pies	67 per cent

In addition to the above, a number of samples was examined in which the meat products only formed a portion of the whole. In such instances it is necessary for the meat products, after separation from the remainder of the ingredients, to comply with the standard for that product. Two samples of baked beans and pork sausages were found to contain insufficient meat in the sausages and similar deficiencies were found in two samples of baked beans with baconburgers in tomato sauce.

Out of a total of 177 meat products examined during the year 19 were reported as being deficient in meat, representing just under 11 per cent. The worst recorded instance was of a sample of steak pies which contained about half an ounce of meat in each pie against the minimum for that particular size of pie of one and a half ounces. Proceedings were taken against the manufacturers of canned frankfurter sausages, pork sausages, and steak pies, the remaining deficiencies being dealt with by repeat samples and correspondence with the manufacturers.

Metallic contamination of food. Samples of food are tested regularly for the possibility of contamination of toxic metals. Two samples, one of canned sardines and the other a soft drink, contained lead in excess of the maximum permitted by the Regulations. In both instances repeat samples were examined in order to ascertain whether the contamination was general or peculiar to the sample examined. In fact the repeat samples of both articles had lead contents below the maximum and no further action was taken. It is interesting to note however, that in the case of the repeat samples of soft drinks, a total of eight samples were examined, the average lead content found was 0.04 parts per million. Although this is well below the maximum permitted level of 0.2 parts per million it was nevertheless double the average of 0.02 parts per million for the lead content of soft drinks from other manufacturers. There is no doubt that with products of this nature the normal lead content is extremely low and that an explanation could be found for any consistent divergence from this low figure.

Preservatives in food. Appropriate samples are examined for the presence of preservatives both from the point of view of the possible use of a non-permitted preservative and also to ascertain that excessive quantities of permitted preservatives are not being used. In no instance during the year was an unsatisfactory sample examined, the only contraventions of the Regulations concerning four samples of sausages all of which contained preservatives, the presence of which was not declared to the purchaser.

Shandy. It is generally accepted that shandy should contain not less than 1·5 per cent of proof spirit. Below this level the product cannot be regarded as containing a significant amount of beer. However, in order to avoid having to sell shandy as intoxicating liquor, it is necessary for the manufacturers to keep the alcoholic strength below 2 per cent proof spirit. Two samples were found to contain only 0·4 and 0·6 per cent proof spirit respectively whereas a third sample contained over 5 per cent of proof spirit. This latter sample contained an active growth of yeast and it is probable that the excessive alcohol content was due to fermentation after bottling.

Vitamin content of foods. A wide variety of foodstuffs declare the presence of added vitamins on the label and these claims are checked analytically. In addition the vitamin contents of margarine and flour are controlled by Regulations. A sample of blackcurrent drink was found to contain less vitamin C than claimed on the label and a sample of plain flour was found to be deficient in vitamin B₁. It was found that the blackcurrant drink had been bottled 15 months previously and as vitamin C tends to disappear on storage, the slight deficiency found was not surprising. The Regulations governing the addition of vitamin B₁ flour stipulate that proceedings shall not be taken against the manufacturer unless the sample was taken at the mill in a prescribed manner. This is because of the extreme difficulty of incorporating the vitamin uniformly in the flour and is to protect the manufacturer from possible prosecution when only a very small sample has been examined. Another sample of flour from the same manufacture as the unsatisfactory one was found to contain the correct amount of vitamins.

Consumer complaints

A total of 32 samples was examined in connection with complaints from consumers during the year. These samples are examined either on behalf of the Food Inspectors or, in the case of samples from the wholesale market, for the Chief Veterinary Officer. The total included eight samples from the school meals service.

Contamination of food. As usual this category contained the largest number of samples examined, the type of contamination varying between comparatively large foreign bodies and various taints which were sometimes rather ill defined. Unfortunately, it not infrequently happens that a foreign body which is alleged to have been found in an article of food is submitted for examination without the original foodstuff. This is unfortunate because further examination of the foodstuff itself can on many occasions give supporting evidence to the allegation that the foreign body was in fact present. In the absence of the original foodstuff the examination has of necessity to be concentrated on the foreign body to see if it has any characteristics which support the complaint. Thus an earwig was submitted with the complaint that it had been found in a can of evaporated milk. Chemical examination of the earwig by the phosphatase test showed quite

clearly that the earwig had not been cooked and therefore could not have been in the can of milk when purchased, as this would have been subjected to a sterilization process. A pin was received which was alleged to have been found in a loaf of bread. This was not a stainless steel pin but was nevertheless clean and bright with no sign of rust or adhering breadcrumbs. It is generally found that when an ordinary pin is baked in a loaf of bread, it shows marked signs of rusting and it was therefore concluded that it was unlikely that the pin had been baked in the bread. This does not necessarily mean that the pin was not in the loaf when purchased, it being quite possible to push one fairly well below the surface after it leaves the bakery. A small aluminium rivet was submitted with the complaint that it had been found in a tin of baked beans. There was no evidence of any of the ingredients of baked beans adhering to the rivet although there was a quantity of material derived from denatured protein and well-cooked starch adhering closely to the metal. It was thought likely that the rivet had in fact come from an aluminium saucepan and that very small residues of food from the earlier use of the saucepan had been well baked on to the surface of the rivet.

A bowl containing the remnants of a helping of porridge showed evidence of a streak of dark material in the porridge. Examination of the foreign material showed it to consist largely of miscellaneous "dirt" including 11 insect fragments. No insect fragments could be found in the remainder of the oats from which the porridge had been made. Iron contamination of some black particles in coconut biscuits suggested contamination with dirt from machinery in the bakery. Three small fragments which superficially resembled small maggots were submitted following their finding in a packet of roast meat in gravy. They were shown to consist of vegetable tissue and were probably derived from the ingredients of the gravy.

A purchaser was alarmed to find that the water in which she had cooked some black puddings had turned violet. This was shown to be due to the presence of artificial colouring matter which had been used to colour the skins of the black puddings.

A number of samples was received which were alleged to have unusual taste or smells but in most instances this could not be confirmed and no satisfactory explanation could be offered. A tin of stewed steak in rich gravy was alleged to have an unusual taste and appearance. It was found to have a perfectly normal composition apart from the fact that it contained sodium nitrite preservative which had not been declared on the label. This could well have modified the flavour of the meat and would also give it a distinctive pinkish colour. Allegations that a sausage roll contained uncooked sausage meat could not be supported as the sausage meat had undoubtedly been cooked. However, the acceptable degree of cooking is to some extent a matter of opinion and this cannot be controlled by analysis.

The only information accompanying a sample of tea was that it was alleged that it had been tampered with. The tea was certainly rather more moist than usual suggesting the repeated use of a wet spoon but no other contaminant could be found.

Samples examined on behalf of the Chief Veterinary Officer included pickled mussels which were examined following an earlier complaint of bacterial decomposition. A sample of prawns was examined following a complaint of a taint and a number of cans of grapefruit juice was examined for possible excessive metallic contamination.

Nature and composition of food. Only two samples were received under this heading during the year, one, a sample of double cream, was slightly deficient in fat, whereas a sample of pasteurised milk contained 54 per cent of added water. In the latter instance the bottle had been opened and a small quantity removed before it was submitted to the laboratory.

Sickness. Nine samples of food were received with complaints that they had caused sickness or other illness. In all instances the composition of the articles was normal and there was no evidence of chemical contamination.

Perhaps the most unusual complaint involved some cheese cakes which were alleged to have caused acute mercury poisoning. Neither the cheese cakes themselves nor any of the ingredients used showed any degree of mercury contamination. The complaint was received indirectly via the baker and it was felt that the complainant had been taking advantage of the recent adverse publicity given to general mercury contamination of the environment.

Drugs

Thirty-seven samples of drugs were submitted to the laboratory during the year. These included a number of preparations for coughs, headaches, hayfever, etc. vitamin and mineral preparations, sulphonamides and antibiotics. Six samples were the subject of adverse reports. One sample, a vitamin and mineral preparation, was seriously deficient in both vitamins A and C. The sample was found to be derived from old stock which had deteriorated during storage and the remainder of the stock was withdrawn from sale. The other adverse reports all concerned some aspect of labelling. In one instance, a sample labelled "Kelp Tablets", the claim was made that the product was rich in iodine and organic trace elements. No doubt this claim was intended to impress the uninitiated but it fell far short of the current labelling requirements. In fact the product did contain iodine but a quantitative declaration of the amount present should have been made as also should have been done for the other unspecified elements, if any.

A sample of antiseptic was received with the complaint that it did not appear to be of normal composition. Analysis showed it to be perfectly satisfactory.

Mercury in food

Towards the end of last year the Government Chemist reported that he had found unexpectedly high levels of mercury contamination in certain varieties of canned fish, especially tuna. It was only possible in the short time available at the end of the year to examine a very small number of tins of tuna which were offered on sale in the City. As only low levels of mercury contamination were found it was considered sufficient to continue this survey by the examination of occasional samples, this time including other varieties of fish as well as tuna.

In all 31 samples of fish, covering 13 varieties, including a few samples of fresh fish, were examined during the year. Eight samples of tuna were examined the mercury content of which ranged between 0.02 and 0.84 parts per million with an average of 0.41 parts per million. This is somewhat higher than was recorded at the end of last year but as there is such a scatter between different samples no significance can be attached to this difference.

The only other fish showing significant levels of mercury contamination were sardines, where four samples gave an average of 0·39 parts per million of mercury and mackerel which averaged 0·20 parts per million, again over four samples. A few shell fish were examined and a figure of 0·14 parts per million was obtained for the average of two samples of crab. Negligible contamination was found in prawns and shrimps.

We are still in the position that no country has yet established legal limits for mercury in food although levels of 0·5 and 1·0 parts per million have been suggested in the United States and Sweden respectively. Although occasional samples were found to exceed the suggested 0·5 parts per million level, in no instance was the average for a particular variety of fish as high as this and there would not seem to be any danger to anyone who eats a varied diet.

Pesticide residues

A total of 30 samples of food was examined for organo chlorine insecticides during the year. These included fresh fruit and vegetables, meat, oils and fat, including butter. In seven samples the amounts present, whilst well below the generally accepted maxima for the various foods, were above the reporting levels of 50 parts per thousand million for DDT and allied compounds and 20 parts per thousand million of other organo chlorine insecticides. Results below these levels are recorded as zero.

The proportion of samples containing insecticides was very similar to last year and once again all samples showed extremely small levels of contamination. Any crop, which has been treated at some time with insecticide, will retain some residues, although in many instances the amount present will be quite infinitesimal. Modern instrumental techniques will detect very low levels indeed of insecticides and it is therefore necessary to keep a sense of perspective when examining the results of analysis.

Miscellaneous samples examined for the Health Department

Of 123 samples examined, 88 represented samples of milk produced at Langho Colony. A number of other foods was examined to assist the inspectors in the course of various investigations.

Lead can occur in toxic amounts in a wide range of coloured articles including various types of paint, pencils and crayons, printing ink etc. Ten samples of gummed paper which were used in infants schools were examined but in no instance was a high lead content recorded. On the other hand, a sample of oil based paint which had been used to decorate part of a building was found to contain 35 per cent of lead in the pigment. This would only present a hazard if the paint were used in a location where it would be likely to be sucked or chewed by small infants.

Other samples examined included a white powder which had been found in a box of pears—this was found to consist of agricultural lime. A sample of dust was examined in the course of investigations into the ventilation of an underground car park and a carpet was examined to ascertain the cause of discolouration. A number of materials was examined in the course of an investigation of a throat irritation in a textile worker.

Water samples

The water samples examined may be classified as follows:—

Drinking waters						
Samples taken to investigate complaints	..	..	..	..	..	20
Routine examinations and checks on previous complaints						15
Ships drinking water	..	..	..	..	..	4
Water other than drinking waters	..	..	..	..	..	21
						—
						60
						—

Drinking water

The public analyst’s laboratory is concerned with the public health aspect of water from the chemical point of view and the “wholesomeness” of the water supply is the primary consideration. The corresponding responsibility from the bacteriological point of view is borne by the Public Health Laboratory Service. The examination of samples by these two laboratories serves as an independent check on the regular tests carried out in the Waterworks Laboratory.

All fifteen samples taken for routine examination were found to be normal and reported as wholesome subject to a satisfactory bacteriological report.

The twenty samples submitted following complaints included several taken during the investigation of the high copper content of water from a drink vending machine. Just over half the complaints from individual consumers related to the dirty appearance of the water ; the other major causes of dissatisfaction were odour and taste. In no instance did examination of the sample lend support to the complaint but this does not, of course, exclude the possibility that at some time prior to sampling cause for complaint did exist. The presence of live crustaceans in one sample did, however, lend limited support to the complaint that the water carried insects.

Four samples of ships water were submitted by the Port Health Authority.

Other water samples

Six samples from the Rochdale canal, taken over a period, indicated that at the point of sampling the degree of contamination was not great and the water could be classified as “fairly clean” when judged by the standards recommended for river waters by the Royal Commission on Sewage Disposal.

Four samples of sub-floor cavity water, three samples of ground water from gardens and one from G.P.O. cable workings were analysed to ascertain source.

Analysis of four samples submitted by the Parks Department failed to provide a reason for the death of fish in a park lake. The Parks Department submitted a further sample in connection with damage suffered by tomato plants ; analytical results were typical of a normal ground water.

One sample of swimming bath water from a private swimming bath, was examined in connection with a complaint of turbidity.

Samples from other sources

Two hundred and eight samples were submitted by other departments and outside bodies in connection with the enforcement of various Acts and Regulations and the checking of the quality of goods purchased by the Corporation.

In the latter category were samples of antifreeze submitted by the Direct Works Department. Appreciable irregularities were found in the percentage of corrosion inhibitor found in the samples and one sample was also found to have been diluted with water. Samples of disinfectant fluid were examined for the Education Department in order to check their compliance with the British Standards Specification.

Parks Department

One hundred and four samples were submitted for analysis under the Fertilisers and Feeding Stuffs Act, 1926, an increase of 15 over the previous year. All the samples were fertilisers and adverse reports were made on 24 of them, representing 23 per cent of those examined ; this is a decrease on the proportion of unsatisfactory samples for the previous two years (29 per cent). In considering these figures it should be borne in mind that many fertilisers have to be examined for trace elements as well as bulk composition. Some of these constituents are present at very low levels and it is only necessary for one such ingredient to be outside the prescribed limits of variation for an adverse report to be made on it. Approximately one-third of the fertilisers were examined for trace elements which accounted for nine of the adverse reports.

Weights and Measures Department

Nine samples were submitted to the Laboratory for analysis. These included samples of toilet cleaners for examination in connection with the requirements of the Weights and Measures Act, which lays down that detergents should bear a declaration of weight on the label. It was considered that two of the samples submitted were detergents and one was not.

A sample of paint was examined for compliance with the requirements of the Petroleum Act. The solvent in the paint was found to be over half toluene which would render the paint highly inflammable but there was no indication of this on the can.

The remaining samples were all submitted for examination under the Trade Descriptions Act, 1968. A sample of aerosol dry cleaner was the subject of a complaint that it was ineffective, but it was found to have a satisfactory composition and be reasonably satisfactory in use. Similarly a sample of polish which was claimed to clean and polish in one operation was found to be satisfactory, although if the dirt was not wiped off as soon as the polish was applied it was liable to be trapped in the film of polish as the wax hardened. A sample of metal polish was also found to polish various metals effectively and also leave the surface protected against subsequent tarnishing. None of the above samples performed perfectly and would probably not be regarded as a "best buy" but they nevertheless performed the functions claimed of them reasonably well and there was no offence against the Act.

On the other hand, a sample described as methylated spirit was found to be methyl alcohol containing a violet dye to make it look like methylated spirit. This was a misdescription which could have had serious consequences, methyl alcohol being appreciably more toxic than methylated spirit.

Manchester Port Health Authority

A total of 66 samples were received during the year, made up of four samples of ships' drinking water, 14 samples of tomato purée and 48 samples of other foodstuffs. The general foodstuffs included canned and fresh fruits,

soft drinks, pickles, dried foods and a number of other items. Adverse reports were given on three samples, one of sugar confectionery and two of pickles of Asian origin, in each case because the food contained a colour not permitted by the Colouring Matter in Food Regulations, 1966.

A number of samples was pre-packed for retail sale and on occasions labelling irregularities were found. These irregularities would only represent an offence against the Labelling Regulations when the products were offered for sale. Nevertheless they were noted in the reports so that the importers could be warned and take suitable action to correct the labels and to avoid possible objection by Food and Drugs Authorities.

Two samples of butter beans which had been contaminated by commercial quality sodium sulphate were found on examination to be adulterated to a negligible degree. In another instance, where the food was kidney beans and the suspected contaminant animal feed, there was no evidence of the latter. Similarly the drinking water from a hydrant on one of the docks was found to be free of the suspected arsenic contamination.

The 14 samples of tomato purée represented 3 consignments from Spain and Italy, mostly in 5 kilogram cans. These were tested for metallic contamination and examined for mould content by the Howard Mould Count. On the basis of a maximum of 50 per cent of microscopic fields containing mould hyphae, one consignment was found to contain a high proportion of unsatisfactory material.

There is no legal standard for the Howard Mould Count in this country, although fixed limits have been adopted in some other countries. Attempts have been going on for some time to attain uniformity of action amongst the various Port Health and Food and Drugs Authorities. During the year the Association of Public Analysts adopted limits of 50 per cent positive fields for tomato purée and 25 per cent positive fields for tomato juice (J. Assoc. Publ. Analysts, 1971, **9**, 104) and all Public Analysts can be expected to adopt this standard when reporting to their Authorities.

Drinking water

All samples were found to be wholesome subject to a satisfactory bacteriological report.

Measurement of atmospheric pollution

The national survey of air pollution is based on the results obtained by the standard daily volumetric apparatus for the determination of smoke and sulphur dioxide. This work has been continued at the same sites as last year and the tabulated results are given.

Measurement of deposited matter have also been made by the analysis of samples collected in three standard atmospheric deposit gauges. The gauges are sited in selected areas having high, medium and low air pollution.

Complaints from residents led to a survey of the deposition of grit in one area of the City, measurements being made over a few weeks at a number of sites distributed around the suspected source. There is no universally accepted method of making grit measurements and investigations have been started into the reliability of available methods in order that the accuracy of the technique finally adopted can be assessed.

Volumetric apparatus for smoke and sulphur dioxide
Daily averages—microgrammes per cubic metre

Station No.		11 Central			13 Withington			15 Clayton			21 Springfield Crumpsall			17 Wythenshawe Centre			18 Rusholme (Chest Clinic)			19 Monsall		
		Smoke	SO ₂	Ratio	Smoke	SO ₂	Ratio	Smoke	SO ₂	Ratio	Smoke	SO ₂	Ratio	Smoke	SO ₂	Ratio	Smoke	SO ₂	Ratio	Smoke	SO ₂	Ratio
1971																						
January	.. ..	237	372	.64	138	199	.69	N	N	N	231	331	.70	154	175	.88	233	337	.69	260	317	.82
February	.. ..	142	350	.41	81	137	.59	114	282	.40	137	232	.59	109	141	.77	152	252	.60	172	255	.67
March	.. ..	101	323	.31	75	154	.49	115	240	.48	102	216	.47	85	138	.62	106	252	.42	109	205	.53
April	.. ..	103	319	.32	54	129	.42	88	194	.45	37	206	.13	64	145	.44	79	232	.34	78	158	.49
May	.. ..	53	156	.34	19	110	.17	44	153	.29	25	141	.17	27	92	.29	43	155	.28	59	119	.50
June	.. ..	47	118	.40	16	103	.16	45	131	.34	39	117	.33	22	80	.28	47	126	.37	43	117	.37
July	.. ..	36	103	.35	18	85	.21	28	117	.24	22	110	.20	26	110	.24	29	110	.26	27	88	.31
August	.. ..	48	122	.39	21	69	.30	44	116	.38	37	111	.33	28	98	.29	58	131	.44	49	99	.49
September	.. ..	84	182	.46	42	107	.39	95	154	.62	81	184	.44	43	107	.40	85	165	.52	105	163	.64
October	.. ..	69	199	.35	28	82	.34	102	148	.69	78	183	.43	30	93	.32	94	147	.64	96	179	.54
November	.. ..	124	291	.43	58	145	.40	142	244	.58	118	198	.60	70	130	.50	146	247	.59	162	228	.71
December	.. ..	108	271	.40	41	117	.35	115	221	.52	105	218	.48	55	125	.44	118	245	.48	124	222	.56
Daily average for year		96	234	.41	49	120	.41	85	173	.49	84	187	.45	59	119	.50	99	200	.49	107	179	.60

The results were calculated from tables supplied by Warren Spring Laboratory, sulphur dioxide from tables dated 1961 and currently in use smoke from revised tables dated 1965.

VETERINARY SERVICES

Outbreaks of notifiable disease among livestock in the city were confined to two confirmed cases of fowl pest and the high incidence of this disease at national level remained little changed.

There were no outbreaks of foot and mouth disease or rabies in the United Kingdom and notifications of anthrax continued to decline.

Following the eradication of swine fever and bovine tuberculosis, "The Brucellosis (Accredited Herds) Scheme" was introduced in 1967 and "The Brucellosis Incentives Scheme" in 1970; the objective of these two schemes being to provide a register of brucellosis free herds from which replacements can be drawn for a subsequent eradication programme.

By the end of September the former scheme contained 1,653, and the latter 42,953, herds involving a combined total of 1,514,723 cattle, which was considered adequate to justify the passing of The Brucellosis (Eradication Areas) (England and Wales), Order 1971. The new Order lists five regions as "eradication areas", one of these being in the North West and including parts of Lancashire, but excluding the City.

As in previous years, the assistance which was sought from the staff of the Public Health Laboratory and Public Analyst, on numerous occasions, always met with a ready response and was greatly appreciated.

Food and Drugs Act, 1955

Meat Inspection Regulations, 1963

Meat Inspection (Amendment) Regulations, 1966

The entire throughput of carcasses both at Manchester Abattoir and the one private slaughterhouse operational within the city was inspected and stamped in accordance with these Regulations.

Meat Inspection (Amendment) Regulations, 1971

These Regulations came into operation on 16th August and increased the maximum permissible charge for inspection of each class of animal carcass for the first time since their introduction in 1963.

Slaughterhouses Act, 1958

Slaughterhouses (Hygiene) Regulations, 1958

Slaughterhouses (Hygiene) (Amendment) Regulations, 1966

Nine infringements of these Regulations were observed and written warnings issued in respect of each.

The Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations, 1966

Eighteen written warnings were administered where the condition of vehicles attending the Manchester Meat Market for the purpose of collecting meat fell short of the requirements of these Regulations. The defects were remedied in each instance before the vehicles again attended the Market.

The Food Hygiene (General) Regulations, 1970

These Regulations were introduced on 1st March to amend, consolidate and revoke those previously in operation since 1960. New provisions require food for pets to be kept in a separate room unless it is canned, and wholesome food to be separated from that which has been rejected.

School canteens

Two thousand one hundred and twenty-six visits were made to school canteens and 101 visits to central kitchens supplying meals to schools.

A further 215 visits were made in response to requests from canteen supervisors for advice regarding the wholesomeness or quality of individual consignments of food.

Bacteriological examination of shellfish

Forty-one samples were taken and none was rejected.

Exportation of meat

Most countries importing meat stipulate that each consignment shall be accompanied by a certificate affirming freedom from disease on ante-mortem and post-mortem veterinary examination.

Seventy-one consignments, involving 4,365 carcasses and 40 cases of canned meat, were exported, mostly to countries within the European Economic Community, appropriate veterinary certificates being issued in each instance.

The Imported Food Regulations, 1968

Under these Regulations the responsibility for the examination of imported foods is placed on the receiving authority, subject to the receipt of advanced information that this has not taken place at the port of entry.

Examinations undertaken

Year ended :— 1968	155
1969	734
1970	2,099
1971	2,400

This increase in notifications of unexamined containers of food places a greater burden on the service than the figures alone suggest, since notification on occasions takes place at night or at a week-end and entails attendance outside the usual working hours.

The Trade Descriptions Act, 1968

This Act, which became operational in its entirety during the year, repeals and replaces the Merchandise Marks Acts, 1887 to 1953.

The Slaughter of Animals Act, 1958

One of the provisions of this Act prohibits the slaughtering of food animals by any person not being the holder of a licence or a provisional licence to slaughter.

Forty licences and 14 provisional licences were issued.

Slaughter of Poultry Act, 1967

This Act requires that turkeys and domestic fowl shall be rendered insensible by stunning prior to slaughter, unless the latter occurs instantly as a result of decapitation, dislocation of the neck or other approved method.

A further provision requires the registration of all premises on which the stunning of domestic fowl or turkeys takes place.

Slaughter of Poultry (Humane Conditions) Regulations, 1971

These Regulations, which came into operation on 1st August, require that no turkey or domestic fowl awaiting slaughter shall be caused unnecessary pain or distress and that these species shall be slaughtered as soon as practicable after arrival ; slaughter must take place immediately if any injury has been sustained.

Adequate ventilation and lighting must be supplied and protection from extremes of weather assured. The length of time during which these species may be held head downwards, and the period which must elapse between slaughtering and plucking, is rigidly defined.

Poultry Inspection

Number of poultry processing premises within the district ..	..	7
Number of visits to these premises .. .. .	..	200
Total number of birds processed during the year .. .. .	..	376,850

Types of birds processed :—

Turkeys	6,950
Ducks	6,000
Hens	297,000
Broilers	6,500
Capons	1,900
Percentage of birds rejected as unfit for human consumption	0.4 per cent
Weight of poultry condemned as unfit for human consumption	9,000 lbs.

Pet Animals Act, 1951

This Act prohibits the keeping of a pet shop without an appropriate licence issued by the local authority wherein the shop is situate.

Further provisions are intended to ensure the preservation of good health and wellbeing of animals in pet shops by prohibiting overcrowding, the sale at too early an age and the undue exposure to disease. An adequate supply of water, food, ventilation and warmth must be provided.

Thirty-eight licences were issued after inspection of the premises by the veterinary staff and 160 routine visits were undertaken.

Animal Boarding Establishments Act, 1963

This act requires all boarding establishments for dogs and cats to be licensed by the local authority.

General provisions are similar to those of the Pet Animals Act, 1951, with an additional requirement necessitating the keeping of a register containing a description of all animals received, together with the date of their arrival and departure and the name and address of the owner.

Seven licences were issued and 80 visits of inspection were made by the veterinary staff.

Riding Establishments Acts, 1964 and 1970

The above Acts prohibit the keeping of a riding establishment unless this has been licensed by the local authority following veterinary inspection. A riding establishment is defined as one in which the owner of the business also owns the horses he hires, whereas a livery stable is one where the business of stabling and husbanding of horses belonging to other people is conducted.

There are at present no riding stables and only one livery stable in the city.

Diseases of Animals Act, 1950

Diseases of Animals (Waste Food) Order, 1957

This Order requires that all "waste food" intended for the consumption of animals and poultry shall be boiled for one hour in a plant licensed by the local authority for this purpose. This provision is intended to prevent the spread of disease amongst animals as a result of contact with infected food.

Thirty-three plants were licensed and 150 visits of inspection were made.

Transit of Animals Orders, 1927 to 1947

Conveyance of Live Poultry Order, 1919

The requirements of these Orders are intended to ensure that humane and hygienic conditions are provided for the transportation and exposure for sale of animals and poultry.

Two hundred visits of inspection were made by the veterinary staff.

Notifiable diseases of animals

Anthrax

No case of this disease occurred within the City, but as part of routine precautionary measures microscopical examinations were undertaken in respect of eight cattle, 70 sheep and 30 pigs where the cause of death appeared to be obscure.

Brucellosis (Area Eradication) (England & Wales) Order, 1971

Brucellosis (Eradication Areas)(England & Wales)(Amendment) Order, 1971

These Orders, which came into operation on 1st November, 1971, define certain areas as "Eradication Areas" and restrict movement into, within and through such areas.

Foot and Mouth Disease Order, 1938

Swine Fever Order, 1963

Tuberculosis Order, 1964

No outbreaks of these diseases occurred within the city.

Fowl Pest Order, 1956

Two outbreaks of this disease occurred in the city.

Live Poultry (Restrictions) Order, 1971

This Order empowers local authorities to grant licences for holding exhibitions of poultry, subject to records being kept available for inspection, indicating the origin and destination of all poultry concerned.

An application to hold an exhibition of poultry as part of the Manchester Flower Show in July was withheld on the advice of the Ministry of Agriculture, Fisheries and Food on account of the severity of the Fowl Pest outbreak nationally.

Regulation of Movement of Swine Order, 1954

This Order requires pigs moved from a market to private premises to be accompanied by a licence and detained under isolation at these premises for a minimum period of 28 days.

Forty-four visits of inspection were made by the veterinary staff.

Diseases of Animals (Approved Disinfectants) (Amendment) Order, 1971

Diseases of Animals (Approved Disinfectants) (Amendment) No. 2 Order, 1971

The first of these Orders amends the list of approved disinfectants, permitted to be used in the various notifiable diseases of animals, in the light of recent research into their efficacy.

The second Order extends from three months to two years, the transitional period during which disinfectants previously permitted, but now disallowed, may continue to be used.

Table A.

Animals inspected at time of slaughter at the City Abattoir 1969-1971

Year	Cattle	Sheep and Lambs	Calves	Pigs
1969	37,639	185,805	2,747	31,122
1970	41,797	219,016	3,488	37,532
1971	45,544	190,862	2,323	33,546

Table B

Total condemnation of various foodstuffs 1969-1971

Year	Meat (tons)	Fish and shell- fish (tons)	Fruit (tons)	Vege- tables (tons)	Game (head)	Poultry (head)	Rabbits (head)	Eggs (No.)	Canned meats milk and sundry provisions (lbs.)
1969	153.33	22.37	68.71	286.67	135	5,942	1,093	534	6.04
1970	130.56	23.93	171.10	268.29	281	6,998	693	998	4.53
1971	160.59	22.26	180.91	234.83	160	6,741	958	200	8.75

Table C

Meat condemned at the City Abattoir and Wholesale Meat Market

	1971	1970
	tons	tons
Total weight of meat condemned at the City Abattoir and wholesale meat market	160.59	130.56
Of which the weight of dressed meat consigned from places other than the City was	28.65	14.67
Included in which were imported offal amounting to	2,220 lbs.	2,127 lbs.

Table D

Carcases inspected and condemned in 1971

	Cattle excluding cows	Cows	Calves	Sheep and lambs	Pigs
<i>Number killed and inspected:—</i>					
At the City abattoir	36,484	9,060	2,323	190,862	33,546
Brought into the City after killing	37,055	—	932	590,328	87,070
(figures for 1970)	37,088	—	1,717	531,881	60,638
<i>All diseases except tuberculosis</i>					
Whole carcases condemned:—					
At the City abattoir	36	—	38	309	72
Brought into the City after killing	7	—	1	16	21
Carcases of which some part or organ was condemned:—					
At the City abattoir	13,022	—	63	5,326	1,967
Brought into the City after killing	873	—	5	572	538
Percentage of the number inspected affected with diseases other than tuberculosis:—					
At the City abattoir	28.592	—	2.712	2.790	5.855
Brought into the City after killing	2.356	—	0.530	0.097	0.618
<i>Tuberculosis only:—</i>					
Whole carcases condemned:—					
At the City abattoir	—	—	—	—	—
Brought into the City after killing	—	—	—	—	—
Carcases of which some part or organ was condemned:—					
At the City abattoir	—	—	—	—	153
Brought into the City after killing	—	—	—	—	—

Table E
Incidence of tuberculosis

Year	Cattle slaught- ered at abattoir	Condemned for tuberculosis		Per- centage incidence	Pigs slaught- ered at abattoir	Condemned for tuberculosis		Per- centage incidence
		Carcases	Part carcasses and organs			Carcases	Part carcasses and organs	
1969	37,839	—	15	0·040	31,122	—	406	1·30
1970	41,797	—	7	0·017	37,532	—	343	0·91
1971	45,544	—	—	—	33,546	—	153	0·46

Amount of unwholesome Food condemned

								1971	1970
								lbs.	lbs.
Meat :—									
Beef	..	..	..	..	..	..	..	296,109	218,891
Mutton	..	..	..	..	..	..	..	24,294	33,181
Veal	..	..	..	..	..	..	..	1,900	2,993
Pork	..	..	..	..	..	..	..	35,201	35,256
Imported offal		..	..	..	..	..	..	2,220	2,127
								359,724 lbs. = 160·59 tons	292,448 lbs. = 130·56 tons
Fish :—								lbs.	lbs.
Fish	..	..	..	..	..	..	..	29,409	35,750
Shellfish	..	..	..	..	..	..	..	20,443	17,857
								22·26 tons	23·93 tons
								Head	Head
Game	..	..	..	..	..	..	..	160	281
Poultry	..	..	..	..	..	..	..	6,741	6,998
Rabbits	..	..	..	..	..	..	..	958	693
Fruit	..	..	..	..	..	..	..	405,239 lbs. = 180·91 tons	383,269 lbs. = 171·10 tons
Vegetables	..	..	..	..	..	..	..	526,014 lbs. = 234·83 tons	600,969 lbs. = 268·29 tons
Miscellaneous :—								lbs.	lbs.
Evaporated, condensed and other milk	..	..						89	294
Canned meats and meat products	..	..						10,570	9,108
Sundry provisions	..	..	..	..	..	..	..	8,946	758

Main causes of condemnation

The weight of meat and offal condemned from the various causes specified was as follows :—

	Meat lbs.	Offal lbs.	Total Year ended 31st December, 1971	Total Year ended 31st December, 1970
Tuberculosis	6,503	81	6,584	10,950
Decomposition	25,524	2,942	28,466	19,998
Decomposition bone taint	1,242	—	1,242	1,245
Injury	9,912	732	10,644	4,505
Abscess	17,831	95,232	113,063	77,338
Emaciation	1,182	102	1,284	739
Dropsy	24,096	821	24,917	20,465
Parasitic distomatosis ..	—	98,321	98,321	91,831
Parasitic hydatid	—	15,070	15,070	12,162
Parasitic C. bovis ..	—	9,250	9,250	7,233
Mastitis	1,314	100	1,414	—
Metritis	920	100	1,020	—
Septicaemia	6,584	307	6,891	5,365
Pyaemia	9,589	1,182	10,771	8,732
Pneumonia	395	100	495	131
Pleurisy	2,676	4,052	6,728	11,771
Emphysema	—	—	—	—
Pericarditis	262	430	692	1,012
Peritonitis	1,771	5,079	6,850	5,817
Enteritis	64	225	289	296
Nephritis	18	105	123	1,103
Uraemia	282	—	282	—
Arthritis	5,840	—	5,840	3,339
Actinomycosis	568	2,020	2,588	3,261
Necrosis	103	17	120	104
Contamination	169	120	289	812
Icterus	710	50	760	527
Pigmentation	430	656	1,086	728
Neoplasm	727	309	1,036	1,419
Swine erysipelas	159	—	159	139
Fatty change	578	—	578	288
Abnormal odour	1,319	123	1,442	366
Moribund	1,194	55	1,249	634
Immaturity	149	32	181	138
Totals	lbs. 122,111	lbs. 237,613	lbs. 359,724 ≡ 160.59 tons	lbs. 292,444 ≡ 130.56 tons

The above includes meats surrendered at the Chief Inspector's Office and meat condemned at shops, warehouses etc., a total of 2.56 tons.

NOTE: The number of condemnations in respect of Tuberculosis was as follows :—

	Year ended	
	1971	1970
Whole carcasses of:		
Beef	—	—
Pork	—	—
Part carcasses and organs:		
Beef	—	7
Pork	153	343

Poultry and game, fruit and vegetables, provisions etc., destroyed as being unfit for human consumption, during 1971.

Poultry and Game		Vegetables	
	<i>Head</i>		<i>/bs'</i>
Fowl	6,244	Asparagus	652
Turkeys	196	Artichokes	2,722
Ducks	44	Beans	5,718
Pigeons	226	Beetroot	5,629
Geese	31	Broccoli	635
Pheasant	127	Cauliflower	33,633
Partridge	6	Cabbage	127,510
Grouse	27	Carrots	46,802
		Cucumber	9,513
		Celery	9,183
		Courgettes	9,660
		Chicory	1,400
		Coriander	1,924
	<i>/bs.</i>	Corn	594
Apples	35,335	Karella	30
Apricots	1,787	Leeks	1,992
Aubergine	7,912	Lettuce	46,715
Avocado	2,368	Marrows	560
Banana	262	Mushrooms	437
Blackberries	233	Maize	1,500
Bilberries	76	Onions	94,443
Capsicum	5,232	Peas	4,332
Cherries	6,445	Parsley	20
Dates	36	Parsnips	10,202
Figs	30	Potatoes	20,724
Grapefruit	2,079	Pumpkin	20
Grapes	4,867	Sprouts	33,320
Gooseberries	4,020	Swedes	48,700
Greengage	37,410	Spinach	305
Limes	70	Spices	4,388
Lemons	6,362	Turnips	1,616
Mangoes	1,350	Watercress	815
Melons	73,437	Yams	320
Nectarine	41		
Nuts	36,224		
Oranges	48,172		
Pears	13,065		
Plums	6,236	Miscellaneous	
Pineapple	4,613		<i>/bs.</i>
Peaches	67,067	Canned Meat	9,872
Pomegranate	1,320	Bacon	8,383
Raspberries	2,750	Cheese	217
Rhubarb	1,478	Cream	89
Strawberries	1,488	Flour	284
Tangerine	3,754	Pastries	62
Tomatoes	29,720	Sausage	698

FAMILY HEALTH SERVICE

Introduction

With the reorganisation of the Health Department during the year, the Family Health Service evolved as a personal health service from the previous Nursing Services Division, undertaking the responsibilities of that Division except those sections transferred to the newly-formed Social Services Department in May, i.e. Day Nurseries, Care of Unmarried Mothers, Home Helps and Child Minders. Details of the activities of the group follow later in the report but important liaison was maintained and developed with hospitals, general practitioners, social services, etc.

1. Liaison with general practitioners and hospitals

Liaison between staffs of the local health authority, general practitioners and hospitals, which began in a small way some years ago, rapidly gained momentum during the year. The staff of each section appreciated the others role with subsequent improved co-operation and communication. Details of liaison with nursing sectors of the Health Department are given under the midwifery, district nursing and health visiting sections of this report, but mention must be made of the important work undertaken by senior medical officers of the Department who were involved in planning and taking part in research schemes in conjunction with their hospital and general practitioner colleagues; for example:—

- (a) A child health record was devised along with colleagues at the University and St. Mary's Hospital. The card is to be initiated antenatally at St. Mary's Maternity Hospital, or in the Health Department for home confinements, and will record details of the birth, post-natal condition and progress of the infant; it will then be passed on to the Medical Officer of Health when the child is discharged from hospital. From then onwards details of the child's progress, immunisation, etc. will be added by medical officers of the Health Department who will undertake developmental screening of each infant at regular intervals up to the age of five years. The records will then be utilised by the School Health Medical Officer. Information will be computerised in the Health Department and it is hoped to extend the recording to all children born in the City.
- (b) Research into the needs of geriatric patients.
A group practice of approximately 10,000 patients was chosen and, of these, 550 individuals were over the age of 75 years. A comprehensive questionnaire was devised in consultation with the Group Practice doctors and Consultant Geriatricians at Withington Hospital. Initial interviewing of patients was undertaken by the health visitors attached to the practice. By the end of the year, 50 questionnaires had been completed and it was evident that dental and visual defects were frequent amongst these geriatric patients. It was hoped that the results of the survey would point to specific areas of need which, having been met, might enable these elderly patients to remain in the community rather than be hospitalised. This work will continue during 1972.

2. **Liaison with Social Services Department**

The group undertook medical supervision of certain sections of the Health Department transferred to Social Services during the year, i.e. Day Nurseries, Playgroups, Knowle House Mother and Baby Home. Medical officers continued to visit these groups at regular intervals to examine children on entrance, to give advice and be available for consultation as required.

A special public health inspector visited all premises where a request had been made for day minding or private nursery provision. Their report was submitted to the Medical Officer of Health who notified the Social Services Department if the premises and prospective child minders were medically suitable to undertake the particular duty. Regular meetings between senior staffs of the Health and Social Services Departments took place for discussion and exchange of ideas on mutual problems.

Home Nursing

During 1971 the City's Home Nursing Service saw a striking increase in the number of new cases referred for treatment as well as nursing visits made. Considering the continued fall in Manchester's population, this was a cause for surprise as well as satisfaction. The number of new patients exceeded those of 1970 by 1,574; the increase in visits amounted to 5,284.

A study of developments in the home nursing service provides for this expansion. The attachment of district nurses to medical practitioners has uncovered many more nursing needs in the community. The liaison service with hospitals has brought into the sphere of the district nurse many patients who formerly would have had no home nursing treatment, particularly dressings and removal of sutures.

Statistics—general nursing

				1971	1970
Patients on books 1st January	..	..		3,274	3,437
New cases attended..	..	..	..	10,983	9,409
				<hr/>	
Total cases nursed	..	..	..	14,257	12,846
Total nursing visits	..	..	..	317,728	312,444
Total visits by bath attendants	..	..	..	17,451	16,782

Classification of patients and nursing visits

				1971		1970	
				Patients	Visits	Patients	Visits
General care	..	..	..	4,267	135,764	4,102	129,327
Injections	..	..	..	4,674	95,467	3,989	101,014
Dressings	..	..	..	3,908	73,124	3,237	68,822
Miscellaneous	..	..	..	1,408	13,373	1,518	13,281
				<hr/>		<hr/>	
Totals	..	..	..	14,257	317,728	12,846	312,444

District nurse attachment to general practitioners

The past year has seen a further increase in attachments of district nurses to medical practitioners.

				1971	1970
Practices	..	..	..	50	33
General Practitioners	..	..	..	155	104
District Nurses	..	..	..	63	35

Working closely with the family doctor is nothing new to the district nurse. The pattern was set at the very beginning over a century ago in this City, when nurses started to visit patients in their homes to give the treatment prescribed by the patient's own doctor and directly responsible to him. In this way a vast fund of trust and goodwill has been built up in the relationship between medical practitioners and district nurses on which both of them can now draw in developing this closer form of partnership.

Then as now doctor and nurse are united in their common service to the patient and his family.

Hospital liaison

In its essence the liaison district nursing service is a bridge—a small bridge—across the gulf separating the hospital nursing service from the local authority home nursing service.

Since its inception in 1966 the hospital liaison nursing service has been extended to more hospitals each year. In 1971 Booth Hall Children's Hospital and United Manchester Hospitals were added. The service is divided into three groups, each group being the responsibility of one district nursing liaison sister. These comprise the following eight hospitals at present:—

<i>North Manchester</i>	<i>South Manchester</i>	<i>United Manchester Hospitals</i>
Crumpsall Hospital (Geriatric Unit)	Withington Hospital	Manchester Royal Infirmary
Jewish Hospital	Burton House (Geriatric Unit)	Manchester Royal Eye Hospital
Booth Hall Children's Hospital	Wythenshawe Hospital	

North Manchester Hospitals

Crumpsall Hospital Geriatric Unit

The geriatricians have continued to discharge patients 'at risk' under the care of the hospital liaison district nurse. Some of the difficulties encountered by these patients have been cushioned by arranging for them to attend the geriatric day hospital. Here they receive physiotherapy and occupational therapy and with this help it has been easier for them to adapt to their homes and activities of daily living.

All the initial home visits are carried out by the liaison sister herself. These consist of assessment visits prior to discharge, special visits to the patient's home at the time of discharge and first treatment when necessary.

At the annual study day held at Crumpsall Hospital the liaison sister was requested to address the ward sisters of the North East Manchester group of hospitals on "Care of the discharged patient". The staff nurses were also addressed on the same subject during their annual refresher course.

Geriatric Unit at Crumpsall Hospital

No. of patients visited in 1971	..	..	..	138
No. of visits made to these patients	..	838		
No. removed from books :				
Recovered	..	..	49	
Admitted to hospital	..	..	11	
Died	..	..	3	
Referred to district nurses	..	..	34	
Referred to health visitors	..	..	4	
Assessment visits for day hospital			20	
Admitted to Part III accommodation			5	
			<hr/>	
			130	
Still on books	..	..	8	
Total	..	..	..	138

Booth Hall Hospital

In April 1971, a district nurse liaison scheme was started with Booth Hall Children's Hospital. Initially this was only with the medical wards and it was found that, although helpful, the demand for home nursing from these wards was not as great as from the surgical wards and the burns unit. Because of this, the liaison was extended in June to include all the wards in the hospital. In the first few weeks a marked reticence was noticed on the part of the ward sisters to discharge children earlier into the care of the district nurses, who they considered were only trained in the care of the geriatric patients. This was gradually overcome, mainly, by being able to stress that it would be a paediatric trained nurse who would visit the patients in their own homes.

Since the scheme started 82 patients have been referred to the care of district nurses. The ward sisters have been very pleased with the arrangement and have also found the liaison sister able to help with various Health Department provisions which are on loan, mainly sick room equipment. They have also appreciated the telephone numbers of district nurses outside the Manchester area, whom they had not previously thought of contacting.

No. of cases referred.

0—1 year	..	..	..	..	..	10
1—2 years	..	..	..	..	..	18
2—5 years	..	..	..	..	..	25
5—16 years	..	..	..	..	..	29
Surgical	..	..	..	..	41	
Medical	..	..	..	..	21	
Orthopaedic	..	..	..	..	10	
Burns	..	..	..	..	10	
Total	..	..	..	..	..	<hr/>
						82

Jewish Hospital

The hospital liaison district nurse has now become a familiar figure to most hospital personnel who frequently seek her out to discuss her work in the community and the availability of other supportive services.

The close association of the hospital liaison district nurse has accounted for the interchange of accurate, up to date information regarding the patient's treatment. This, together with relevant details of social conditions, supplied by the medical social workers, has resulted in a smoother discharge home and subsequent uneventful recovery.

Unlike the Crumpsall Hospital geriatric unit, the Jewish Hospital liaison service relies entirely on the co-operation of the district nurses for its home nursing visits. The district nurses appreciate this link with the hospital because they gain valuable information about their patients illness and treatment in hospital.

No. of cases referred :

Over 65 years	..	..	..	..	..	..	54
Under 65 years	..	..	..	..	..	..	85
Medical	..	..	..	..	41		
Surgical	..	..	..	..	98		
Total							139

South Manchester Hospitals

University Hospital of South Manchester (Withington Hospital)

In the University Hospital of South Manchester the number of referrals to the District Nursing Service for dressings and removal of sutures has grown steadily.

The five-day ward scheme was discontinued in the spring, thus accounting for a marked decrease in the total number of referrals. However, the new concept of daily discharges remained with the institution of the new professorial units. This has proved to the great satisfaction of the district nursing staff and the relief of the busy ward staff who now do not have to spend valuable time with discharged patients who require dressings or removal of sutures. Most important, the patient can now return to his family at the earliest possible date with the assurance that he will have the continuity of professional care in his own familiar surroundings.

No. of patients referred :—

Over 65 years	..	..	..	..	..	..	238
Under 65 years	..	..	..	..	..	..	242
General care	..	..	..	..	93		
Dressings	..	..	..	..	161		
Removal of sutures/clips	..	..	..	..	114		
Injections	..	..	..	..	49		
Assessments of nursing need	..	..	..	..	43		
Others	..	..	..	..	20		
Total	..	..	..	..	..	..	480

Burton House (Withington)

Burton House and the geriatric unit continue to make very good use of the liaison scheme with an increase in the number of referrals and cases for assessment. The co-operation of the district nurses prove most valuable in providing information of the home circumstances of patients for ward staff when assessing the patient’s future needs after discharge.

The day hospital is in the process of much change. It is hoped that it will be able to take many more patients each day in the not too distant future, thus giving a most valuable service to the elderly and at risk patients of South Manchester.

The day hospital staff continue to use the liaison scheme for gaining information regarding patients’ non-attendance, also checking changes in

the home situation, i.e. if days of attending fits in with relatives' arrangements or home helps' days. This very often proves valuable to the ambulance service who would otherwise make unnecessary calls.

The service too is invaluable in relieving the strain on relatives who could not continue to care for the patient indefinitely, as in the case of the unmarried daughter who visits her elderly aunt on the days her own mother attends the day hospital. Thus two elderly people are being supported at home who might otherwise require long stay care in hospital.

During the year an invitation by a consultant physician was extended to the liaison district sister to be present on his ward rounds and afterwards at the discussion which followed. This was accepted and takes place when time allows as it provides a deeper understanding of the clinical picture of the patient's case from the time of admission and helps in the continuity of care after discharge.

No. of patients referred :—

Over 65 years	..	..	..	..	..	..	264
Under 65 years	..	..	..	..	..	..	24
General nursing care			..	..	132		
Dressings	..	..	..	..	10		
Injections	..	..	..	..	10		
Assessments of Nursing Needs				..	58		
Removal of sutures	..	..	..		1		
Others	..	..	..	..	77		
Total	..	..	..	..	..	..	288

Wythenshawe Hospital

Dressings and removal of sutures account for the largest number of referrals not only from wards but out-patients and casualty departments. This has resulted in cutting down the numbers of patients returning for treatment. This is much appreciated, especially by elderly patients who can now have their treatment without leaving the comfort of their fireside, especially in inclement weather.

No. of patients referred :—

Over 65 years	..	..	..	..	..	..	84
Under 65 years	..	..	..	..	..	..	134
General care	..	..	..	..	37		
Dressings	..	..	..	..	93		
Injections	..	..	..	..	8		
Removal of sutures	..	..	..	..	30		
Assessments of nursing needs				..	30		
Others	..	..	..	..	20		
Total	..	..	..	..	..	..	218

United Manchester Hospitals

The district nursing liaison service with the United Manchester Hospitals commenced in October 1971. Before commencing the service it had been decided that full value would only be obtained from the liaison service between the home nurses and the hospitals if each hospital was absorbed separately and made fully operational before starting with the next.

At present the service is operational within the Manchester Royal Infirmary and the Royal Eye Hospital from November 1971. It is envisaged that liaison with Saint Mary's Hospital will commence in January 1972 and then at Barnes Hospital, Cheadle, at a later date to be arranged.

Good communications and relationships have been established with the medical staff and nursing staff within the hospitals. Communications with administrators, records officers and clerks, medical social workers, X-ray department, physiotherapy department and out-patients departments were also made in the course of the preparatory work.

Initially the referral of work via the liaison service was rather slow until the hospital staff realised the value of the service and the scope of work that the home nursing service is capable of fulfilling.

There is no evidence at present to show that the service is helping to a great extent with the better utilisation of beds, but it is obvious that patients are not being requested to return to the hospitals for procedures such as dressings and removal of sutures which can ably be done in the home.

With the commencement of the liaison service into the hospitals there has been a greater understanding between the hospital and the home nursing service resulting in the patients receiving their full and continuous treatment.

Cases referred showing age groups and treatment required:—

Over 65 years	..	..	..	..	..	..	85
Under 65 years	..	..	..	..	..	..	48
Dressings	..	..	..	..	48		
Removal of sutures	..	..	..	39			
Ophthalmic	..	..	..	7			
Home assessments	..	..	..	6			
Injections	..	..	..	6			
General nursing care	..	..	..	27			
Total	..	..	..	..	..	..	133

Classification of new cases

Diagnosis					1971	1970
Heart disease	..	..	..	..	842	765
Malignant disease	..	..	..	..	745	697
Bronchitis	..	..	..	..	259	291
Tuberculosis	..	..	..	..	93	62
Other respiratory disease	..	..	..	..	217	216
Multiple sclerosis	..	..	..	..	137	92
Hemiplegia	..	..	..	..	346	332
Diabetes	..	..	..	..	114	89
Anaemia	..	..	..	..	863	674
Rheumatoid arthritis	..	..	..	..	208	185
Miscellaneous	..	..	..	..	7,159	6,006
Totals	..	..	..	..	10,983	9,409
Age Groups					1971	1970
0- 4 years	..	..	..	..	292	258
5-14 years	..	..	..	..	365	252
15-64 years	..	..	..	..	5,262	4,584
65 and over	..	..	..	..	5,064	4,315
Totals	..	..	..	..	10,983	9,409

Night nursing service

The night service suffered a serious blow in August 1971 owing to resignations due to removal from the area of two very able nurses. In spite of advertising the posts several times, they remain unfulfilled and therefore the scale of the service has had to be reduced. Nevertheless, the service has continued and urgent cases have received attention throughout the area.

During the year, 283 patients received 2,958 visits.

Staff

Nursing is still predominantly a woman's occupation and the average modern nurse is a married woman. Because of this, a high degree of staff mobility must be expected.

It was gratifying to note that the overall number of staff had increased by a total of 10 over the previous year.

District nurse training

District nurse training is aimed at producing a nurse who is self-sufficient, resourceful and has the ability to apply all the skill and techniques learnt in hospital within a variety of domestic settings. The art of home visiting is an important aspect of training because owing to the variable home conditions that are met, the nurse has to be very adaptable and become accustomed to meeting people in their own surroundings and to establishing good relationships. The period of adjustment to becoming a 'guest' in the patients home and at the same time maintaining a professional approach and giving good nursing care can in some instances be quite a lengthy and traumatic time for the nurse. Specialised training helps to facilitate this transitional period.

The nurse is trained to appreciate the concept of total patient care and not to be confined to coping only with the patient's physical needs. In the home the environmental, emotional, social, spiritual and educational needs of patients and relatives must be taken into consideration and assessed and dealt with accordingly. During training the nurse is helped to appreciate and fulfil her role as a teacher and to utilise opportunities for health education. Teaching relatives simple nursing procedures to enable them to supplement the care given by the trained staff is another important function of the District Nurse which is emphasised. She must also show concern for personal problems as they arise. The training also aims at preparing the nurse for future participation in the training of new entrants to district nursing and in the supervision of other grades of staff. Finally, it gives the nurses understanding of the community services and how to utilise these to the best advantage of all concerned.

In 1971, as in previous years, two training courses were held in preparation for the National Certificate of District Nursing awarded by the Department of Health and Social Security. Altogether, forty students participated in the training courses and of these, sixteen students were from Manchester. Bolton, Bury, Rochdale, Salford and Stockport students continued to join the Manchester course for theoretical training but the students from these authorities gained practical training and experience within their own areas. All the students who entered for the May 1971 examination were successful and eight students were waiting to take the written examination early in 1972.

Enrolled nurses

Two ten week courses of in-service training were held during the year in preparation for the National Certificate in District Nursing for State Enrolled Nurses, which is now awarded by the Department of Health and Social Security. All students attended the Manchester District Nurse training for one day each week for ten consecutive weeks. Practical experience and training was gained within the students' employing authority. During the year, 7 students from Bury and Stockport and 11 students from Manchester participated in these training courses. All 9 students entering for the September 1971 examination were successful.

The students on both these courses maintained a high level of interest and enthusiasm throughout their training. They expressed appreciation of the course and felt they had gained insight and a better understanding of what it means to nurse in the community.

Bachelor of Nursing course

During the year Bachelor of Nursing students were allocated to training centres within the City of Manchester for supervised district nursing practice. This was an on-going process throughout their four year period of training and took the form of short placements in the department i.e. one half-day each week and block placements of 1, 2 or 3 weeks duration. Where possible the nurse worked at the same centre and with the same practical work instructor on each occasion, The students also participated in group discussions and tutorials.

In-Service training

During the summer of 1971 a very successful refresher course was held for all bath attendants working in the City of Manchester.

Ten bath attendants participated and attended lectures, films and demonstrations for one day each week for five consecutive weeks. The aim of this course was to increase the knowledge of these valuable workers and to give them a better understanding of their role and function within the community health nursing team.

A course of lectures on a variety of topics including "The process of Ageing", "New Drugs and their side effects" and "The treatment of Cancer by Radiotherapy" were arranged for all members of the district nursing service. These lectures were held at fortnightly intervals over a period of three months and were delivered by consultants from Manchester Hospitals.

The lectures were well supported and appreciated by all the staff who attended.

Management courses

The senior staff of the home nursing services participated in mixed management courses organised by the Regional Hospital Board and Local Government Training Board.

Attendances at management courses were as follows :—

Superintendent Home Nurse	Appreciation of Management Course
1 Assistant Superintendent	Middle Management Course
3 Senior Nurses	1st Line Management Courses.

Members of staff attending these courses benefitted by meeting colleagues from other fields and studying common problems of management and future responsibilities.

Transport

There were 113 members of staff using their own cars at the end of the year. Transport provided by the Corporation consisted of 11 mini vans, 1 car and 12 cycles.

Health Visiting

The setting up of the new Social Services Department has proved a most beneficial move for the health visitor. In her daily round of duty she is, as ever, in constant contact with social problems but she now refers these to the Social Services Department instead of dealing with them herself. Freed from extraneous preoccupations she can devote her energies and skills to the task for which she has been trained, namely the total care and after-care of families in her area, a task undertaken in co-operation with the medical officers of the local authority, general practitioners and hospitals.

The health visitor's role in the early detection of abnormalities is an invaluable one. She is a practitioner who visits the home before there is a problem and is therefore in a position, through her observational skills to detect quickly any deviation from the normal, healthy development of all members of the family, and to take immediate steps to ensure that any necessary attention is given.

The general practitioner liaison developed steadily and plans were made for future expansion.

It is heartening to record that the improvement in the staffing position noted last year was steadily maintained, but the turnover of personnel, especially in the field of school nurse/clinic nurse continued to present problems.

Nine health visitors resigned—one returned and one was transferred to the Social Services Department when that department was set up. One health visitor and twelve student health visitors who qualified in August were appointed to fill existing vacancies.

The approved establishment in the health visitors section and the numbers employed at the end of the year were as follows:—

	<i>Approved establishment</i>	<i>Employed (approximate wholetime equivalent)</i>
Administrative staff	2	2
Tutors	3	3
Group advisers	5	5
Health visitors in charge of centres	19	19
Health visitors	85	73
Health visitors (part-time)	—	8·5
School nurses/clinic nurses	90	65
School nurses/clinic nurses (part-time)	—	10·5
Town Hall clinic sister	1	1

Training course for health visitors

Students enrolled on course September 1970—September 1971	43
Students who completed their training	42
Sponsored by Manchester Health Department	13
Seconded from Midwifery Service	1
Student who withdrew from training (Re-entered training September 1971)	1
Candidates successful in final examination	40
referred in written papers	—
referred in oral examination	1
failed in examination	1
Required to complete extended period of supervised practice because of sick leave	1
Successful in referral examination	1
Students enrolled September 1971	40
Sponsored by Manchester Health Department	5
Seconded from Midwifery Service	1

The course continues to be held in Bracken House, an annexe of Manchester Polytechnic, and the programme of lectures, practical experience and examination during the 1970-71 course was similar to those of the previous two years.

Co-operation with medical and nursing officers in adjacent areas has continued and developed. Tutors have visited students in their fieldwork placements and meetings have been held in the Polytechnic for fieldwork instructors and nursing officers.

The development of courses within the Polytechnic has continued :-

1. Fieldwork instructor courses
- (a) November 1970—May 1971

22 experienced health visitors enrolled (of whom 3 were seconded by Manchester).

21 successfully completed the course.
- (b) November 1971—May 1972

18 experienced health visitors enrolled (of whom 2 are seconded by Manchester).
2. Assessors conference
- In June 1971 a two-day course was held for experienced health visitors required to assess the students ten-week period of supervised practice. This was followed by a half-day meeting in August.

23 health visitors attended (of whom 4 were seconded by Manchester).

Several changes occurred during the summer months. Administrative and academic reorganisation in the Polytechnic led to the formation of a new faculty entitled "The Faculty of Community Studies", in which courses for the preparation of teachers, social workers, probation officers, youth employment and careers officers, community leaders, occupational health nurses, health visitors and fieldwork instructors are being held. Students have similar interests and joint seminars and tutorials between health visitors and social workers or community leaders have been organised and found successful.

From September 1971 the modified syllabus of the Council for the Education and Training of Health Visitors, was implemented. The qualifying examination is to be conducted in two parts. Part 1 will be held at the end of the academic year, i.e. in June, and will take the form of five written papers (instead of three as formerly) ; each paper concerned with one section of the syllabus. Part II will be an oral examination based on four health visiting studies prepared during the year and will take place at the end of the period of supervised practice, i.e. early September.

The Individual project is no longer required as an examination subject but tutors have retained group project work as a teaching method during the course.

Tutors have participated in the teaching of other groups, e.g.

- (i) in teacher training, by organising a course of first-aid for students specialising in physical education ;
- (ii) contributed to the lecture and tutorial programme of the social work course ;
- (iii) provided a course of health visiting lectures and tutorials for the final year of the Bachelor of Nursing degree course at Manchester University ;
- (iv) taken part in an in-service training course for health visitors in Cheshire County Council preparing staff for developmental screening of the 0-5 year olds ;
- (v) assisted the district nurse tutor with the lecture programme for students ;
- (vi) given single lectures as required to student nurses at the United Manchester Hospitals.

Tutors have continued to provide teaching and administrative experience for health visitors taking the one-year teacher training course at Bolton College of Education. One student was placed in Manchester during the 1970-71 course and two are gaining similar experience during the 1971-72 academic year.

In-service training

The theme of the 32nd Annual Refresher Course held in March for health visitors, school nurses and others engaged in health education, was "Nutrition". The lectures dealt with the nutrition of all age groups ranging from infants to the very elderly. This was a most interesting and stimulating day enjoyed not only by staff from all sections of the Health Department but by representatives from other local authorities, hospitals and voluntary organisations who attended.

This year saw the introduction of an Induction Training Course for school nurse/clinic nurses. The course was of three weeks duration and included lectures on those aspects of the work of the Health Department concerned with Family Services and School Health Services as well as lectures from members of Social Services Department staff and certain sections of the Education Department staff. Observation visits were made to clinics and practical experience was given under the supervision of health visitors and senior school nurses.

Conferences and post-graduate courses

Organisation	Place	Title	Duration of Course	Numbers attending
Health Visitors' Association	London	Management Appreciation	9 days	1 deputy superintendent
Health Visitors' Association	London	Middle Management (Part I)	9 days	1 group adviser
Health Visitors' Association	London	Post-Graduate	9 days	2 health visitors
Health Visitors' Association	Exeter	Middle Management	12 days	1 group adviser
Health Visitors' Association	Cambridge	Realism and the Handicapped	13 days	1 health visitor
Health Visitors' Association	Cambridge	School Nurse Course	13 days	4 school nurses
Lancashire County Council Education Committee	Stretford Technical College	Teaching and Health Education	Non-residential Sept./Oct. ($\frac{1}{2}$ day per week)	8 health visitors

Prevention of accidents

The crippling effects, perhaps loss of life, due to accidents in the home are a cause for great concern to all those engaged in community health work. Experience has taught health visitors how essential it is for all parents, not only those who give indication of inadequacy, to be aware of the frequency of home accidents and the simple methods of their prevention.

The health visitor had available to her much propaganda mainly in the form of posters and film strips which she used when giving talks to groups of mothers or to teenage girls in the schools.

Posters were displayed in the Department's maternal and child health centres.

Notification of births 1971

The total number of notifications adjusted by transfer was 9,135, comprising 9,000 live births and 135 stillbirths.

Total registered births number 9,068; 8,930 live births and 138 stillbirths.

Care of aged and infirm persons

Elderly and infirm people, especially those living alone, present their own peculiar problems. The highly commendable independence of youth and middle age can be a great hindrance to supplying help when an aged person requires urgent physical or material assistance and demands great understanding on the part of health visitors and other community workers who are involved in their care.

The reluctance of many of these elderly people to accept the services available to them causes much anxiety to staff whose patience and perseverance is rewarded only by the eventual voluntary acceptance of either domiciliary, hospital or social services assistance.

There were 841 new patients referred to the department and 14,353 visits made by the health visitors, compared with 827 and 12,990 respectively in 1970.

The following statistics include comparable data from 1970:—

						1971	1970
Voluntary admissions to hospitals	..	..				83	141
Admitted to nursing homes	..	..	..			8	13
Transferred to:—							
Social Services	..	..	..	..	..	112	94
Other services	..	..	..	..	..	3	1
Died at home	..	..	..	..	..	170	157
No further action necessary	..	..	..			140	154
No trace	..	..	..	..	..	11	11
Removed outside Manchester area	..	..				51	30
Carried forward	..	..	..	..	..	2,102	1,917
						<hr/>	<hr/>
Total cases dealt with	..	..	..	..	..	2,672	2,518
Total visits	..	..	..	..	..	14,353	12,990

As reported elsewhere a "geriatric survey" was commenced, including all patients over 75 years of age, in one group practice in the City.

Midwifery

During 1971 the work within the midwifery section underwent significant changes. Two General Medical Practitioner Units were opened, one in Saint Mary's Hospital and one in Crumpsall Hospital, both being staffed by domiciliary midwives. This required considerable adjustment of midwifery duties to ensure that effective domiciliary services were maintained and to provide cover for the additional work.

In June, Her Majesty the Queen officially opened the new Saint Mary's Maternity Hospital to which patients had been admitted since 5th April, 1970. During her tour of the hospital the Queen visited the general practitioner unit and spent some time talking to patients, general medical practitioners and Health Department staff.

The number of family planning clinics was increased and a training programme instituted, both increasing the work of midwives. An average of 3.3 midwives was used solely for duties at family planning clinics, attending 1,531 sessions compared with 1,090 in 1970.

In the second half of the year a research project into Cytomegalovirus of the newborn was introduced, buccal swabs being obtained by the midwife from all babies delivered at home and in the general practitioner units. Dr. Tobin, of the Public Health Laboratory, was conducting the research which it was hoped would be of great value in the future.

During the year there was a rise in the birth rate to 16·82 compared with 15·96 in 1970. Despite this, the number of births to Manchester mothers decreased by 691 due to the continued loss of population.

The 928 deliveries (839 in the home and 89 in the general practitioner unit) by domiciliary midwives represented 9·8 per cent of the total births to Manchester citizens.

Notification of intention to practise

There were 395 notifications of intention to practise, as follows:—

Municipal midwives	Maternity Homes having no resident officer	Training institutions	Total
80	9	306	395

Supervision of midwives

This statutory duty was undertaken by the Supervisor of Midwives and two assistants.

Visits were made as follows:—

To hospitals and nursing homes	..	..	..	..	116
To midwives in their own homes	..	..	..	..	72
To antenatal and mothercraft classes	..	..	..	..	105
Supervision of nursing and labour visits	..	..	..	..	240
Routine inspection of records	..	..	..	..	103
Meetings and lectures attended outside the Town Hall	..	..	..	..	9
Visits to general practitioners	..	..	..	..	5
Evening visits to depot re night rota system	..	..	..	..	7
Lectures given	..	..	..	..	8
Pupils' examinations	..	..	..	..	9
Family planning clinics	..	..	..	..	67
Visits to St. Mary's Hospital General Practitioner Unit	..	..	..	..	38
Miscellaneous	..	..	..	..	73

The Supervisor of Midwives acted as an examiner at the Central Midwives Board examinations on four occasions.

Municipal midwives

The work of the domiciliary midwife is now more complex than that of her colleague of ten years ago, and actual confinements are a very small part of her work.

Allowing for sickness, depot duties, attendances at family planning clinics and Saint Mary's and Crumpsall General Practitioner Units, the average full-time midwife delivered 26·5 cases during 1971. The average work of all full and part-time midwives during a month included:—

1971	1970	
26	24	Ante-natal and home assessment visits
138	112	Nursing visits

As well as these duties midwives attended patients in early labour, obtained all blood specimens from expectant mothers, took blood specimens from babies for Scriver tests, and undertook liaison with the maternity hospitals and general practitioners. They were also responsible for teaching pupil midwives and students who accompanied them on their visits and for maintenance of equipment and records.

The Service provided a 24-hour service, every midwife being on call for duty 204 hours during a 14 day period.

Recruitment to the Service continued to be adequate although during November and December, the Service was understaffed due to expansion of duties and unavoidable delays in the appointment of new staff.

At the end of the year 53 full and 15 part-time midwives were in post.

Of the patients booked for home confinement 414 were cancelled for the following reasons:—

	Number of mothers
Not pregnant	4
Booked St. Mary's G.P. Unit	3
Patients request for hospital confinement ..	19
Removals from Manchester	50
Medical condition	18
Miscarriage.. .. .	15
Social reasons	22
Rhesus negative with antibodies	7
Ante-partum haemorrhage	14
Anaemia	6
Malpresentation	56
Previous obstetrical history	11
Twin pregnancy	9
Pre-eclampsia toxæmia	28
Premature labour	43
Intra-uterine deaths	3
Foetal distress	8
Post maturity by dates	72
Delay in labour	27

Confinements in hospitals not staffed by a resident medical officer dropped from 590 in 1970 to 468. One of these, Crossley Hospital, which was run by the Salvation Army, discontinued as a maternity home in July. The number of mothers booking into Crossley Hospital had decreased considerably over the past few years due to the increasing number of National Health Service beds available within the City, following the building of Wythenshawe and the new Saint Mary's Maternity Hospitals.

Crossley Hospital transferred to a home for elderly patients. Sincere thanks is extended to the members of the Salvation Army for the excellent care they have given to mothers and babies during the past years. The needs of the community have changed but the hospital will continue to give a much needed service not adequately met from other sources.

There were 38 babies born at home before the arrival of a midwife when the patient was booked for hospital confinement and nine where the patient had not made any arrangements for the confinement.

General medical practitioner units

In 1971 two services were introduced which allowed expectant mothers to book their own general practitioner and domiciliary midwife to undertake care during the ante-natal, labour and post-natal period but instead of the confinement taking place within the home, the patient was delivered in the main labour ward suite of Crumpsall or Saint Mary’s Maternity Hospitals. Patients had the advantage of easy transfer from general practitioner to consultant care if abnormalities occurred during labour.

Crumpsall general practitioner unit

Expectant mothers booked for this unit were taken to the hospital by the midwife when labour was established, the midwife remaining with the patient during labour. Mothers and babies were transferred home four hours after delivery accompanied by the midwife. Twelve patients were delivered in the unit during 1970 and expressed preference for these arrangements compared with those in other traditional hospital or home confinements.

Saint Mary’s general practitioner unit

This unit consisting of 25 lying-in beds and two labour wards was staffed by domiciliary midwives with auxiliary staff from Saint Mary’s Hospital. An assistant supervisor of midwives was appointed with responsibility for this unit. She was based on the lying-in ward and became a member of the committee formed to decide policy for the unit. Other members of the committee were nominated by the general medical practitioners, Saint Mary’s Hospital and the health department.

Patients, when in labour, were transferred directly from their home to a labour ward of the unit, a midwife being called from the district to undertake care of the expectant mother and to stay with her until delivery had been completed.

Following delivery the mother and baby were transferred to the lying-in ward and cared for by the staff on this unit.

Transfer home was arranged according to the patients’ needs and the advice of the general practitioner and domiciliary midwife. The day of discharge home from the unit was as follows :—

	1	2	3	4	5	6	7	8	9	10+
Number	5	9	30	15	8	3	8	—	—	2

Antenatal care

A total of 18 antenatal clinics were held weekly, nine less than in 1970, the cancellation of these sessions being due to the decrease in home confinements.

Midwives made 1,586 attendances at antenatal clinics compared with 2,966 in 1970. At all clinics blood specimens were taken by midwives.

Seventeen general practitioners held antenatal clinics in their own surgeries, the midwife being present, an increase of six since 1970. Attendances at mothercraft classes have rapidly decreased during recent years as the number of mothers booked for home confinement has fallen.

At one maternity hospital a mothercraft session was held each week by the domiciliary midwives, and both home and hospital booked patients were encouraged to attend. At the same hospital a district midwife assisted during a weekly antenatal clinic. These two innovations helped to increase the understanding between hospital and district staff and were of value to hospital patients who came under the care of the district midwife after discharge from hospital.

Midwives made 4,763 antenatal visits to patients in their own homes, a decrease of 2,317 from 1969. These included visits made at the request of hospital staff, to patients who had defaulted at a hospital clinic.

Deliveries

The analysis of births in the City according to place of delivery was as follows:—

Domiciliary confinements		General practitioner unit by domiciliary midwives		Institutional		
Doctor booked	Doctor not booked	St. Mary's hospital	Crumpsall hospital	Institutional	Maternity homes without a resident medical officer	Total
792	47	87	12	13,108	468	14,514

The number of births notified within the City was 14,514, an increase of 573 on 1970; 5,378 were to mothers resident outside Manchester and 345 Manchester mothers were delivered outside the City.

Stillbirths

There were 132 notified stillbirths within the City compared with 204 in 1970. Of the 132 to Manchester mothers eight occurred within domiciliary practice.

Of these one was an unbooked emergency and three were booked for hospital confinement.

The following tables include details of birth weight and duration of pregnancy.

Weight				Abnormal	Macerated	Fresh	Total
4½ lbs. and under	..	..	..	1	2	2	5
Over 7 lbs.	..	..	..	Nil	2	1	3
Totals	..	..	..	1	4	3	8

Duration of pregnancy	4½ lbs. and under	Over 7 lbs.	Total
7 months	2	Nil	2
8 months	2	Nil	2
Full-term	1	3	4
Totals	5	3	8

Analgesia

Trilene analgesia was administered to 603 mothers; a doctor was present during 29 of these deliveries.

Radio-telephones

The radio-telephones continued to be a valuable aid. They enabled the midwives to obtain medical aid speedily and ensured that midwives on the district could be diverted to homes where they were needed.

Home investigations and visits

Midwives made 8,482 visits at the request of the hospital authorities to assess whether early discharge was possible or if the home was suitable for medically fit patients. The total for 1970 was 7,321.

This aspect of the midwives' work has been of increasing importance over the past ten years. It is essential that adequate provision is made within the home before a newborn baby is transferred to it from a hospital. The newborn baby is especially vulnerable to cold and infections; visits made by the domiciliary midwives during the antenatal period allow her to advise the mother on the preparation necessary and give written instructions on the procedure to be followed.

Early discharge following hospital delivery

This scheme remained unchanged during the year when 6,237 mothers were discharged before the ninth day; in 1970 the number was 5,861. A total of 1,708 mothers were discharged after the ninth day. The domiciliary midwives attended 93·4 per cent of all delivered mothers and babies born to Manchester residents.

The care needed by these mothers and babies formed a major part of the domiciliary midwives' work and return to the community at this early stage with midwifery care enable a more rapid "turn over" of hospital beds than would otherwise have been possible.

Other visits by domiciliary midwives include:—

	1971	1970
To patients in early labour	1,275	1,612
Nursing to booked patients	11,334	16,040
Nursing to patients discharged from hospital	51,695	50,489
No access visits	4,944	Not separated from other visits

Training and educational activities

Nine midwives attended the Family Planning Training Course introduced by the Health Department. This made available a total of 38 trained staff to assist in the 19 weekly Family Planning Clinics.

There were 40 domiciliary midwives approved by the Central Midwives Board to undertake training of pupils. Eighty pupils received district training compared with 85 in 1970. These pupils were from the four Part 2 training schools in Manchester; 32 from St. Mary's Hospital, 26 from Crumpsall Hospital, 5 from Wythenshawe Hospital and 17 from Withington Hospital.

In addition 45 obstetric students, 7 students undertaking the Bachelor of Nursing Degree Course at the University of Manchester and 11 district nurse students were provided with domiciliary midwifery experience, accompanying midwives on their visits and attending an ante-natal clinic. Other observers to the section included trainee welfare officers, social workers and one local authority nursing officer, to enable her to qualify as a supervisor of midwives.

Sixteen midwives attended a compulsory post-graduate course under Rule G.2 of the Central Midwives Board. The Health Committee approved the secondment of one midwife to the Health Visitor Training Course and one midwife successfully completed the course and examination for the Midwife Teachers Diploma.

The Emergency Obstetric Unit (Flying Squad)

This service continued to be based at Saint Mary's Maternity Hospital and served the City of Manchester and surrounding areas.

Transport was by Manchester local authority ambulances, which took the equipment, an obstetrician and, if necessary, an anaesthetist, to the home or nursing home where the service was required. The ambulance was also available to transfer the patient to hospital if necessary.

Maternal deaths

The Registrar General recorded no maternal deaths in Manchester during 1971. Five deaths were investigated for the Confidential Report into maternal mortality. One patient concerned died in Manchester but was resident outside the City.

Infant mortality

Of 204 of the deaths under one year of age that were subjected to special scrutiny, 119 were males and 85 females, an infant mortality rate of 25.96 per 1,000 male live births and 19.80 per 1,000 female live births. Of these deaths, 66 per cent (135) occurred in the neonatal period, the great majority (124) in the early neonatal period in fact; 69 per cent (82) of the male and 62 per cent (53) of the female deaths under one year of age were located in the neonatal period.

Of the neonatal causes of death, 72 per cent (59) of male and 70 per cent (37) of female neonatal deaths were classified to perinatal causes (International Classification of Diseases Codes 760-779); 16 per cent (13) of male neonatal deaths and 13 per cent (7) of female neonatal deaths were ascribed to congenital anomalies (codes 740-759). Of the remaining 19 neonatal deaths, 11 were attributed to infections of the respiratory tract.

Of the 59 male and 37 female neonatal deaths ascribed to perinatal causes, 44 per cent (26) of the male deaths and 54 per cent (20) of the female deaths were classified to anoxia and hypoxia (code 776) ; 29 per cent (17) of these 59 male deaths and 35 per cent (13) of these 37 female deaths were ascribed to the unqualified immaturity (code 777). Thus these two causes alone accounted for 73 per cent of male and 89 per cent of female neonatal deaths.

In the post-neonatal category, 54 per cent (37) of the 69 deaths were male and 46 per cent (32) were female ; 54 per cent (37) of these deaths were attributed to infections of the respiratory tract and 20 per cent (14) to congenital anomalies.

With a relatively low total of deaths (204), the classification of deaths according to socio-economic grouping was not a worthwhile exercise for statistical reasons.

These figures in general support the premise that in the neonatal period the major causes of death occur from the hazards of the prenatal and intra-natal periods and the occurrence of early developmental accidents, whereas in the post-neonatal component mortality especially from the respiratory and gastro-intestinal infections is predominant.

Since 1967 was the year in which Manchester achieved its lowest ever infant mortality rate, the following information is of interest.

Year	Mortality Rates					
	Stillbirths	Perinatal	Early Neonatal	Neonatal	Post-neonatal	Infant
	per 1,000 total births (live and still)		per 1,000 live births			
1967.. ..	19.6 (15.1)	32.5 (25.4)	13.2 (10.8)	14.3 (12.5)	8.5 (5.8)	22.8 (18.3)
1968.. ..	15.9 (14.3)	29.9 (24.7)	14.3 (10.6)	16.1 (12.4)	10.3 (5.9)	26.4 (18.3)
1969.. ..	16.5 (13.2)	32.9 (23.4)	16.6 (10.3)	18.2 (12.0)	10.8 (6.0)	29.0 (18.0)
1970.. ..	15.4 (13.0)	30.0 (23.5)	14.9 (11.0)	16.7 (12.3)	6.7 (5.9)	23.4 (18.2)
1971.. ..	15.2 (12.0)	28.9 (22.0)	13.9 (10.0)	15.0 (11.6)	8.5 (5.9)	23.5 (17.5)

Rates in parenthesis apply to England and Wales.

The relatively large fluctuation, in this table in the Manchester rates compared with the National rates is because the latter are an average of a very large number of births, etc., compared to Manchester's number of 10,000 births or less.

The infant mortality rate of 23.5 in 1971 is only fractionally greater than the final rate of 23.4 in 1970. The rates for stillbirths, perinatal and neonatal deaths were all below the final rates in 1970, but the post-neonatal rate was higher than in 1970. This can be accounted for by an increase of mortality from respiratory infections in 1971. When the lowest infant mortality rate was achieved in Manchester in 1967, the still-birth, perinatal and post-neonatal mortality rates were all higher than in 1971, but the neonatal mortality rate was lower. In 1967, only the death rates from congenital anomalies and diseases of the nervous system were lower than in 1971.

Premature baby service

There were six midwives, trained in the care of premature and ill babies, in post at the end of the year. One vacancy existed but the appointment of a suitable candidate was made to commence duty in 1972.

During May the staff were decentralised from the Town Hall to the new health centre at Brunswick Street. This move solved the increasing difficulty experienced in parking cars centrally and enabled the staff to work more effectively. A senior sister was appointed to undertake the organisation of the staff and their work.

Of the 891 babies referred to the premature baby staff, 16 were discharged from hospital with their mothers against medical advice. All babies of 5 lb. 12 ozs. birth weight or below, and all babies discharged from a hospital premature baby care unit were visited by a premature baby sister irrespective of the weight on discharge from hospital.

The importance of adequate facilities in the home for newborn babies cannot be over estimated and this is of even more importance for premature babies. The policy of additional home visits prior to discharge from hospital was begun three years ago and during this year, 521 home assessments were made against 420 in 1970. This was done to ensure that adequate preparation had been made. When inadequate the hospital staff co-operated by retaining these babies until the home was considered suitable or the baby had increased its weight. Despite these efforts two babies were re-admitted to hospital with hypothermia and the following example demonstrates some of the difficulties.

Case A. An unmarried mother aged 23 years discharged herself and her half-caste baby who weighed 4 lb. 5 ozs., against medical advice on the 5th day after confinement. There was no one at home to care for her and her three children. The putative father only lived with this woman spasmodically, the remainder of his time being spent with another single girl and their two illegitimate children.

The mother developed a high temperature due to infection and her baby had a respiratory infection. She refused to return to the hospital by ambulance for a follow-up visit, arrangements for which had been made during her stay in hospital. Mrs. A. and her baby were visited twice or three times a day by the premature baby sister for the first week and then daily for a further three weeks until suitable for transfer to the care of the health visitor.

The social worker visited Mrs. A. at the request of the premature baby sister in an effort to help Mrs. A. with her problems.

There was good liaison between hospital and domiciliary staff. A premature baby sister visited all maternity hospitals most weeks to be present when the consultant paediatrician held his out-patient clinic and/or accompanied him on his round of the special baby care unit.

A summary of visits is given as follows:—

	1970	1971
To mothers and infants under 10 days..	2,114	3,991
To mothers and infants over 10 days ..	6,679	3,863
To paediatric clinics	91	150
To hospitals other than clinics	93	105
To child welfare clinics	110	135
To general practitioners' surgeries ..	107	79
To general practitioners unit	—	13

An analysis, by birth weight, of the premature infants referred for care, together with the numbers transferred to hospital whilst in the care of the premature baby sisters, is given below:—

Weight at birth	Number	Transferred to hospital
Under 3 lbs. 4 ozs.	21	1
3 lbs. 4 ozs.—4 lbs. 6 ozs.	104	4
4 lbs. 7 ozs.—4 lbs. 15 ozs.	180	7
5 lbs. 0 ozs.—5 lbs. 8 ozs.	323	8
5 lbs. 9 ozs. and over	263	8
Totals	891	28

Feeding established on discharge of the babies was as follows:—

Breast fed	45
Breast and complement fed	15
Artificially fed	815

Of six babies known to have died, the registered causes of death were as follows:—

Gastro enteritis	1
Meningitis, Septicaemia	1
Acute bronchiolitis	3
Pneumonia.. .. .	1

28 babies were known to have been transferred to hospital for the following reasons:—

Chest infection (pneumonia, bronchitis, etc.)	5
Gastro-enteritis	7
Failure to thrive	8
Strangulated hernia	1
Bruising of skin	0
Inflamed testicles	1
Jaundice	1
Vomiting	2
Hypothermia	2
Ophthalmia neonatorum	1

Premature live and stillbirths

Particulars of premature live births notified (as adjusted by transferred notifications) are shown below:—

In hospital	779
At home	48
In private nursing homes	3
	<hr/> 830 <hr/>

The number of premature stillbirths notified (as adjusted by transferred notifications) was:—

In hospital	92
At home	6
In private nursing homes	—
	<hr/> 98 <hr/>

Weight at birth	Premature live births																	Premature stillbirths	
	Born at home or in a nursing home																		
	Born in hospital					Nursed, entirely at home or in a nursing home					Transferred to hospital on or before 28th day								
	Total births	Died			Total births	Died			Total births	Died			Total births	Died					
within 24 hours of birth		in 1 and under 7 days	in 7 and under 28 days	within 24 hours of birth		in 1 and under 7 days	in 7 and under 28 days	within 24 hours of birth		in 1 and under 7 days	in 7 and under 28 days	within 24 hours of birth		in 1 and under 7 days	in 7 and under 28 days				
1 2 lb 3 oz or less	29	23	1	1	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	in hospital	at home or in a nursing home	
2 Over 2 lb 3 oz up to and including 3 lb 4 oz	48	18	7	1									3	1			22		
3 Over 3 lb 4 oz up to and including 4 lb 6 oz	142	11	8		10								1	1			24	1	
4 Over 4 lb 6 oz up to and including 4 lb 15 oz	181	4	3		2								7	1			11	1	
5 Over 4 lb 15 oz up to and including 5 lb 8 oz	379	5	2		28										1	1	16	3	
6 Total ..	779	61	21	2	40								11	3	1	1	92	6	

1 = 1,000g., or less, 2 = 1,001 – 1,500g, 3 = 1,501 – 2,000g, 4 = 2,001 – 2,250g, 5 = 2,251 – 2,500g.

Analysis of Stillbirths
(Figures compiled in the department)

Cause	Totals	Males	Females	Legitimate	Illegitimate	Place of confinement		Stillbirth certified by		
						Hospital or nursing home	Domiciliary	Doctor	Midwife	Uncertified
Maternal conditions:—										
Disease in mother	2	2	—	2	—	2	—	2	—	—
Disease of pregnancy:—										
Toxaemia	15	11	4	13	2	14	1	15	—	—
Difficult labour	2	—	2	2	—	2	—	2	—	—
Other complications of pregnancy:—										
Haemorrhage	5	2	3	3	2	5	—	5	—	—
Hydramnios	1	1	—	—	1	1	—	1	—	—
Multiple pregnancy	1	1	—	1	—	1	—	1	—	—
Premature rupture of membrane ..	1	—	1	—	1	1	—	1	—	—
Placental and cord conditions ..	41	21	20	31	10	39	2	41	—	—
Foetal conditions:—										
Birth injury	1	1	—	—	1	1	—	1	—	—
Congenital anomalies:—										
Anencephalus	11	4	7	10	1	11	—	10	1	—
Hydrocephalus	4	1	3	4	—	4	—	4	—	—
Spina bifida	2	1	1	2	—	2	—	2	—	—
Microcephalus	1	—	1	—	1	1	—	1	—	—
Other congenital anomalies ..	1	1	—	1	—	1	—	1	—	—
Other conditions:—										
Haemolytic	4	2	2	4	—	4	—	4	—	—
Maceration	19	6	13	15	4	17	2	19	—	—
Anoxic	19	11	8	13	6	19	—	18	1	—
Immaturity unqualified	5	4	1	2	3	3	2	5	—	—
Unspecified	4	1	3	3	1	3	1	4	—	—
All causes	139	70	69	106	33	131	8	137	2	—

Stillbirths, perinatal deaths, neonatal deaths, post-neonatal deaths and infant death rate, 1951-1971

Year		Total live and stillbirths	Stillbirths		Perinatal Deaths		Neonatal Deaths		Post-neonatal Deaths		Deaths under 1 year and stillbirths		Infant death rate per 1,000 live births
			Number of stillbirths	Rate per 1,000 live and stillbirths	Number of perinatal deaths (stillbirths and deaths under 1 week)	Rate per 1,000 total live and stillbirths	Number of neonatal deaths. 0-4 weeks	Rate per 1,000 total live births	Number of post-neonatal deaths. 4 weeks-1 year	Rate per 1,000 total live births	Number of deaths under 1 year and stillbirths	Rate per 1,000 total live and stillbirths	
1951	..	12,757	319	25.01	521	40.84	251	20.18	188	15.11	758	59.42	35.29
1952	..	12,716	349	27.45	575	45.22	269	21.75	155	12.53	773	60.78	34.28
1953	..	12,573	355	28.24	583	46.37	255	20.87	118	9.66	728	57.90	30.53
1954	..	12,232	389	31.80	587	47.99	237	20.01	112	9.46	738	60.33	29.47
1955	..	12,022	318	26.45	496	41.26	215	18.37	117	10.00	650	54.07	28.37
1956	..	12,291	324	26.36	538	43.77	241	20.14	117	9.78	682	55.49	29.92
1957	..	12,755	331	25.95	555	43.51	261	21.01	113	9.09	705	55.27	30.10
1958	..	12,657	322	25.44	533	42.11	237	19.21	79	6.41	638	50.41	25.62
1959	..	12,638	306	24.21	498	39.40	223	18.08	102	8.27	631	49.93	26.35
1960	..	12,922	327	25.30	530	41.01	237	18.82	129	10.24	693	53.63	29.06
1961	..	13,294	291	21.89	531	39.94	268	20.61	120	9.23	679	51.08	29.84
1962	..	13,873	302	21.77	530	38.20	263	19.38	150	11.05	715	51.54	30.43
1963	..	13,599	288	21.18	508	37.35	247	18.56	144	10.82	679	49.93	29.37
1964	..	13,555	272	20.07	479	35.34	244	18.37	138	10.39	654	48.25	28.76
1965	..	12,775	258	20.20	448	35.07	213	17.02	124	9.91	595	46.58	26.92
1966	..	12,208	223	18.27	383	31.37	198	16.52	108	9.01	529	43.33	25.53
1967	..	11,531	226	19.60	375	32.52	162	14.33	96	8.49	484	41.97	22.82
1968	..	10,909	173	15.86	326	29.88	173	16.11	110	10.25	456	41.80	26.36
1969	..	10,165	168	16.53	334	32.86	182	18.21	108	10.80	458	45.06	29.01
1970	..	9,566	147	15.37	287	30.00	157	16.67	63	6.69	367	38.37	23.36
1971	..	9,068	138	15.22	262	28.89	134	15.01	76	8.51	348	38.38	23.52

Legitimate and illegitimate live births and deaths of infants under one year of age—Manchester and England and Wales

(Registrar General's returns 1951–1971)

Year	LIVE BIRTHS					DEATHS UNDER ONE YEAR OF AGE								
	Legitimate	Illegiti- mate	Totals	Illegitimate percentage of total live births	Illegitimate percentage of total live births England & Wales	Number			Rate per 1,000 related live births					
						Legitimate	Illegitimate	Totals	Legitimate	Illegitimate	Totals			
1951	11,616	822	12,438	6.58	4.84	407	32	439	35.03	38.93	35.29	29.2	38.5	29.6
1952	11,549	818	12,367	6.61	4.80	398	26	424	34.46	31.78	34.28	27.2	34.9	27.6
1953	11,450	768	12,218	6.29	4.75	352	21	373	30.74	27.34	30.53	26.5	33.0	26.8
1954	10,967	876	11,843	7.40	4.70	322	27	349	29.36	30.82	29.47	25.1	32.1	25.4
1955	10,879	825	11,704	7.05	4.66	312	20	332	28.68	24.24	28.37	24.5	31.7	24.9
1956	11,052	915	11,967	7.65	4.80	327	31	358	29.59	33.88	29.92	23.4	28.5	23.7
1957	11,407	1,017	12,424	8.19	4.80	337	37	374	29.54	36.38	30.10	23.0	30.0	23.1
1958	11,291	1,044	12,335	8.46	4.88	284	32	316	25.15	30.65	25.62	22.3	27.8	22.6
1959	11,186	1,146	12,332	9.29	5.09	298	27	325	26.64	23.56	26.35	21.9	27.4	22.0
1960	11,412	1,183	12,595	9.39	5.44	338	28	366	29.62	23.67	29.06	21.5	26.4	21.7
1961	11,675	1,328	13,003	10.21	5.90	355	33	388	30.41	24.85	29.84	21.1	25.3	21.4
1962	11,974	1,597	13,571	11.77	6.60	355	58	413	29.65	36.32	30.43	21.3	27.3	21.7
1963	11,634	1,677	13,311	12.60	6.90	344	47	391	29.57	28.02	29.37	20.8	26.0	21.1
1964	11,507	1,776	13,283	13.37	7.24	330	52	382	28.68	29.28	28.76	19.4	26.3	19.9
1965	10,741	1,776	12,517	14.19	7.66	280	57	337	26.07	32.09	26.92	18.5	24.9	19.0
1966	10,205	1,780	11,985	14.85	7.89	251	55	306	24.60	30.90	25.53	18.5	24.6	19.0
1967	9,442	1,863	11,305	16.48	8.40	210	48	258	22.24	25.76	22.82	17.9	23.7	18.3
1968	8,866	1,870	10,736	17.42	8.52	239	44	283	26.96	23.53	26.36	17.8	23.4	18.0
1969	8,203	1,794	9,997	17.95	8.41	218	72	290	26.58	40.13	29.01	17.4	25.4	18.1
1970	7,696	1,723	9,419	18.29	8.25	166	54	220	21.57	31.34	23.36	17.5	25.9	18.2
1971	7,228	1,702	8,930	19.06	8.38	168	42	210	23.24	24.68	23.52	16.9	24.1	17.5

Causes of death in infancy and childhood
(Registrar General's abridged list)
(Figures compiled in the department)

Cause of Death	Under 1 year				Totals	1 to 5 years				Totals	Total under 5 years
	Under 4 weeks	4 weeks and under 3 months	3 months and under 6 months	6 months and under 1 year		1--	2--	3--	4--		
Enteritis and other diarrhoeal diseases	2	—	2	—	4	—	—	—	—	—	4
Diphtheria	—	—	—	—	—	—	—	—	1	1	1
Whooping cough	—	—	1	—	1	—	—	—	—	—	—
Meningococcal infection	—	—	—	—	—	—	—	—	—	—	—
Other infective and parasitic diseases	2	2	—	1	5	—	—	—	—	—	5
Malignant neoplasms	—	—	—	—	—	—	1	—	—	1	1
Endocrine etc., diseases	—	—	—	—	—	—	—	—	—	—	—
Meningitis	1	2	—	—	3	—	—	—	—	—	3
Other diseases of nervous system	—	—	1	3	4	—	—	—	1	1	5
Circulatory diseases	1	1	—	—	2	1	—	—	—	—	3
Pneumonia	6	8	8	3	25	—	—	—	2	2	27
Other diseases of respiratory system	2	9	5	4	20	1	1	—	—	—	22
Intestinal obstruction and hernia	—	—	—	—	—	—	—	—	—	—	—
Other diseases of digestive system	1	1	—	—	2	—	—	—	—	—	2
Musculoskeletal diseases	—	—	—	—	—	—	—	—	—	—	—
Congenital anomalies	23	9	6	1	39	1	1	1	1	5	44
Birth injury	10	—	—	—	10	2	—	—	—	—	10
Difficult labour	—	—	—	—	—	—	—	—	—	—	—
Anoxia	39	1	—	—	40	—	—	—	—	—	40
Maternal conditions unrelated to pregnancy	—	—	—	—	—	—	—	—	—	—	—
Toxaemia of pregnancy	1	—	—	—	1	—	—	—	—	—	1
Other complications of pregnancy	13	—	—	—	13	—	—	—	—	—	13
Condition of placenta	—	—	—	—	—	—	—	—	—	—	—
Termination of pregnancy	—	—	—	—	—	—	—	—	—	—	—
Haemolytic disease	2	—	—	—	2	—	—	—	—	—	2
Condition of foetus	1	—	—	—	1	—	—	—	—	—	1
Immaturity unqualified	29	—	—	—	29	—	—	—	—	—	29
Suffocation in bed or cradle	—	1	—	—	1	—	—	—	—	—	1
Accident motor vehicle	—	—	—	—	—	—	—	—	—	—	—
Other violence	1	—	—	—	3	3	4	2	2	11	14
Ill defined	—	2	3	2	5	—	—	—	—	—	5
Totals	134	36	26	14	210	8	7	3	7	25	235

There were no deaths from syphilis, measles, scarlet fever or poliomyelitis.

Deaths under one year of age from major causes 1951–1971

(Figures compiled in the department)

Year		Immaturity unqualified		Injury at birth		Congenital anomalies		Other diseases of early infancy		Diarrhoeal diseases		Respiratory diseases		Total deaths	Infant mortality rate per 1,000 live births
		Deaths	Rate per 1,000 live births	Deaths	Rate per 1,000 live births	Deaths	Rate per 1,000 live births	Deaths	Rate per 1,000 live births	Deaths	Rate per 1,000 live births	Deaths	Rate per 1,000 live births		
1951..	..	60	4.8	47	3.8	56	4.5	117	9.4	30	2.4	78	6.3	439	35.3
1952..	..	86	7.0	43	3.5	77	6.2	78	6.3	19	1.5	83	6.7	424	34.3
1953..	..	85	7.0	44	3.6	53	4.3	70	5.7	9	0.7	70	5.7	373	30.5
1954..	..	52	4.4	44	3.7	81	6.8	90	7.6	11	0.9	49	4.1	349	29.5
1955..	..	62	5.3	31	2.6	72	6.2	71	6.1	6	0.5	54	4.6	332	28.4
1956..	..	70	5.9	29	2.4	66	5.5	92	7.7	5	0.4	54	4.5	358	29.9
1957..	..	86	6.9	44	3.5	64	5.2	83	6.7	2	0.2	56	4.5	374	30.1
1958..	..	80	6.5	40	3.2	48	3.9	82	6.6	5	0.4	39	3.2	316	25.6
1959..	..	63	5.1	33	2.7	53	4.3	85	6.9	3	0.2	37	3.0	325	26.4
1960..	..	79	6.3	28	2.2	75	6.0	82	6.5	15	1.2	43	3.4	366	29.1
1961..	..	91	7.0	44	3.4	79	6.1	81	6.2	12	0.9	57	4.4	386	29.7
1962..	..	74	5.5	48	3.5	63	4.6	75	5.5	32	2.4	72	5.3	415	30.6
1963..	..	79	5.9	50	3.8	55	4.1	79	5.9	11	0.8	78	5.9	390	29.3
1964..	..	58	4.4	36	2.7	79	5.9	89	6.7	16	1.2	61	4.6	382	28.8
1965..	..	54	4.3	43	3.4	56	4.5	83	6.6	8	0.6	64	5.1	336	26.8
1966..	..	47	3.9	25	2.1	51	4.3	77	6.4	10	0.8	68	5.7	306	25.5
1967..	..	49	4.3	20	1.8	42	3.7	55	4.9	14	1.2	58	5.1	258	22.8
1968..	..	48	4.5	20	1.9	44	4.1	61	5.7	11	1.0	70	6.5	282	26.4
1969..	..	49	4.9	17	1.7	43	4.3	66	6.6	23	2.3	68	6.8	290	29.0
1970..	..	35	3.7	12	1.3	39	4.1	64	6.8	7	0.7	39	4.1	220	23.4
1971..	..	29	3.2	10	1.1	39	4.4	57	6.4	4	0.4	45	5.0	210	23.5

Health Centres

Brunswick health centre

This centre, the first in the City's health centres capital development programme, was completed in March and commenced operation in April. The building is located in the Brunswick comprehensive redevelopment area neighbourhood centre. Other community services have been or will be provided nearby.

The centre was officially opened on November 24th by Alderman Joe Taylor, J.P., Chairman of the Health Committee, who unveiled a commemorative plaque during a ceremony attended by aldermen, councillors and senior officers of the City Council, general practitioners and representatives of the staff of the centre.

The cost of erecting and furnishing the health centre was £129,673. The accommodation includes seven general practitioner consulting suites utilised by eight general medical practitioners displaced by the demolition of their existing premises during the process of clearance of unfit property in the Brunswick redevelopment area and adjacent areas.

Comprehensive local health authority services and school health services were provided including dental facilities. Family health staff based in the centre included a senior medical officer, the deputy superintendent of district nurses, a group adviser, a fieldwork instructor, health visitors and school nurses, district nurses, premature baby sisters, chiropodists and bath attendants.

The health centre provided a considerable focus of general practitioner and local authority medical services within one building working so far as is possible as an integrated unit.

The Health Department staff appreciated not only the improved facilities which were available for the local authority services but, even more important, the opportunities which working with general practitioners in ideal conditions offered to improve the co-ordination of the local health services and the general practitioner services to the consequent benefit of patients.

Darbshire House health centre

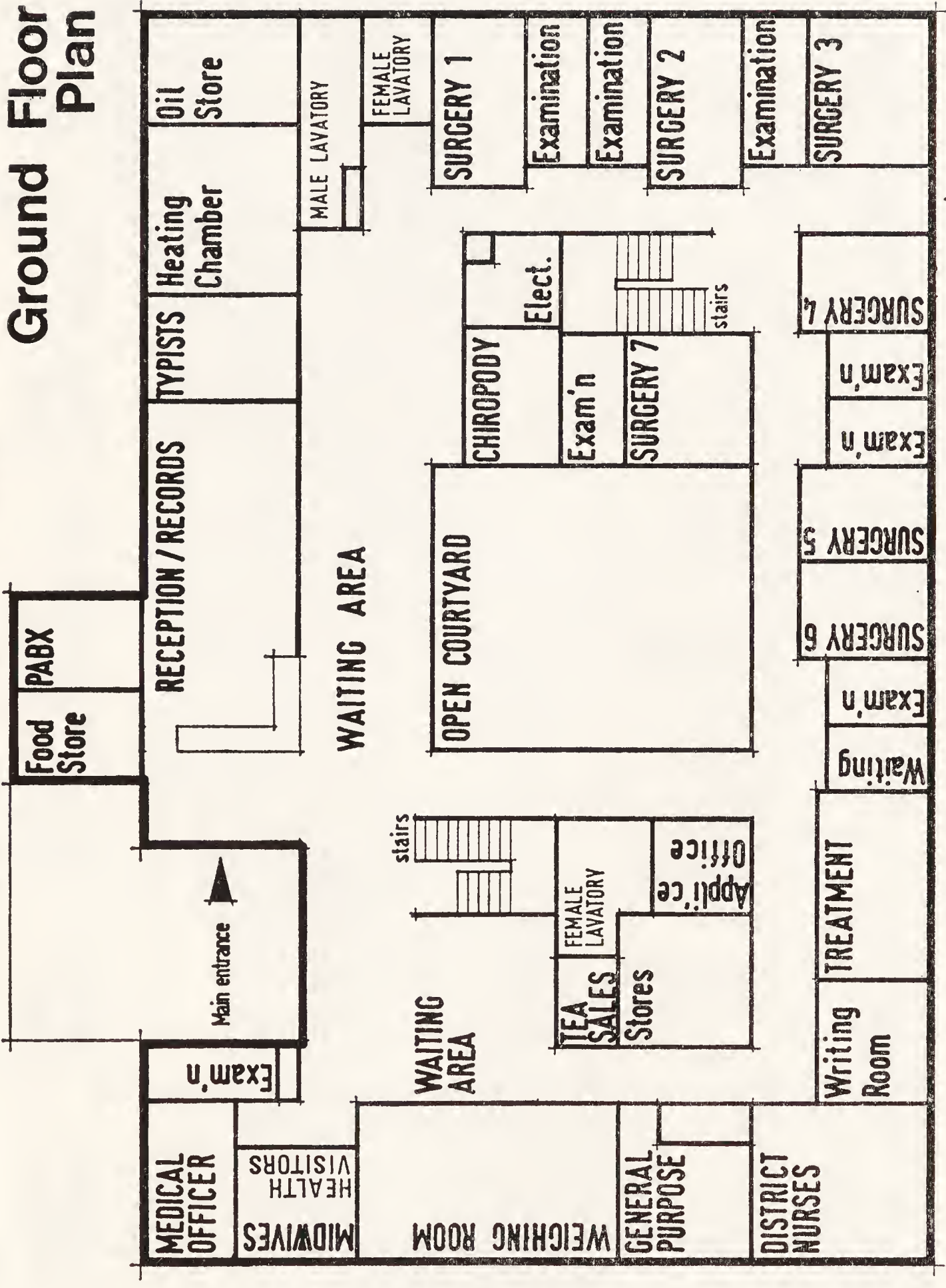
An extension was added to the existing building at Darbshire House during the year providing several study rooms for the doctors, a seminar room for medical students, together with a library which was put at the disposal of both medical and nursing staff.

There was a marked increase in the number of clinic attendances in the first part of the year due mainly to the anxiety caused by the diphtheria outbreak. The second half of the year saw a marked fall in numbers due to the lessening of fears about diphtheria, the change in the immunization programme, the widespread demolition in the area and the transfer of children to the Brunswick Centre.

The repercussions following these factors were the closing of the health visitors' session on Wednesday mornings, the decrease in attendances of babies under one year of age and also the decrease in the number of babies attending for screening tests of hearing. The attendances at the Toddlers' Clinic, however, remained stable.

The antenatal clinic attendances were similar to those for 1970. An appointment system was introduced and found to be worthwhile.

Ground Floor Plan



▲ Staff and wheelchair entrance

First Floor Plan

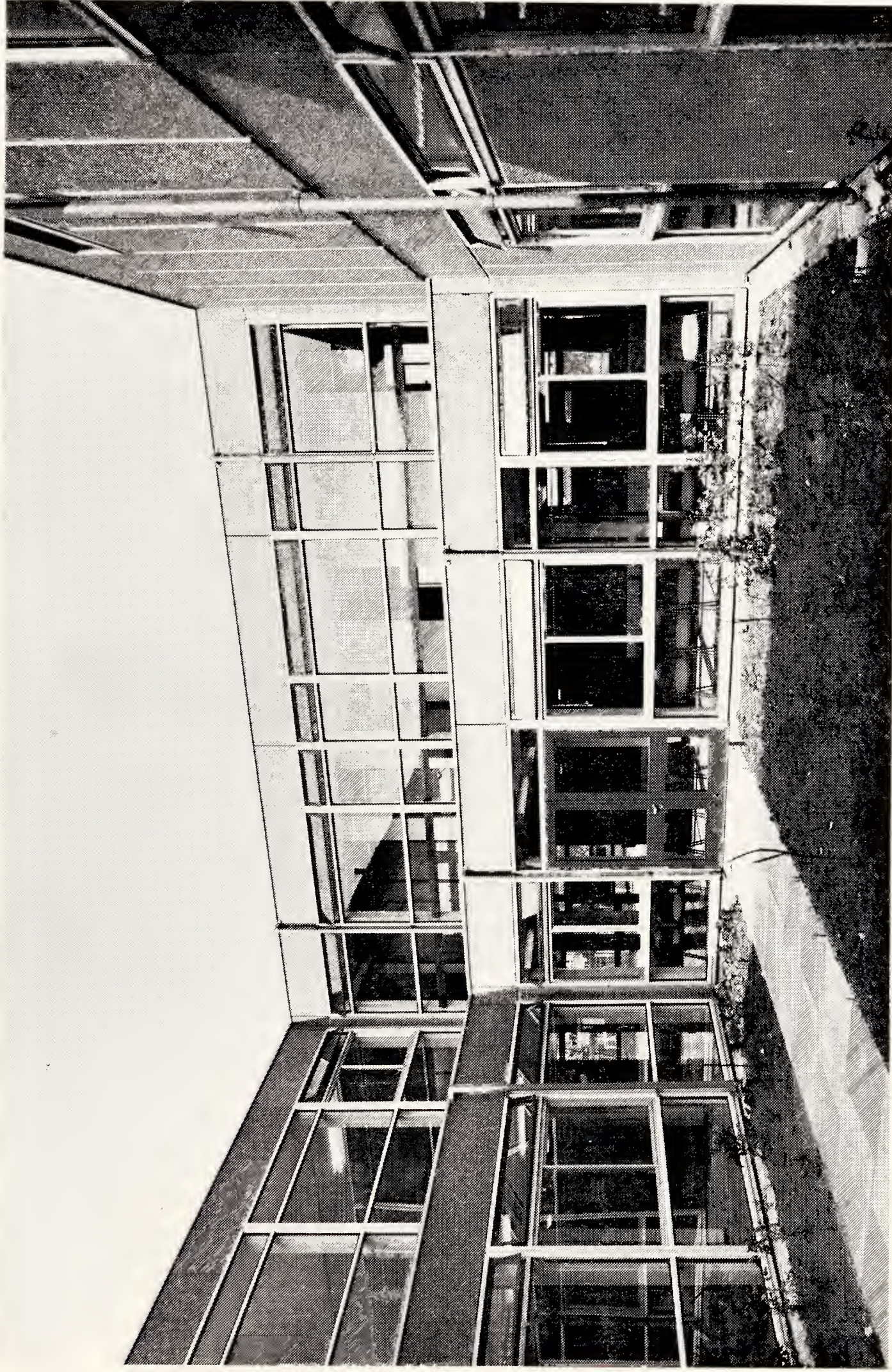




Brunswick Health Centre



After being received at the Reception Unit, patients attending to see general practitioners sit in the adjacent, large waiting area. This has a pleasant outlook on to the open patio and varied coloured chairs add to the brightness of the decor. Patients are called to their individual doctors by means of a public address system and colour coded signs help to direct them to the surgeries.



An interesting feature of the Brunswick Health Centre is the open patio which is sited in the centre of the building. In addition to the practical purpose of providing more natural light, it gives a pleasant outlook for both patients and staff.

Health Visitor attachment to this Practice had been in progress for over a year and was functioning successfully. The General Practitioners increased the number of cases they referred to the health visitors and also invited them into their surgeries for consultations with the patients present.

Darbishire House introduced the attachment of district nurses to medical group practices in Manchester and since 1954 district nurses have been members of the Darbishire House team. From the pioneering venture of that day, district nurse attachment has become accepted practice in the nineteen seventies.

The district nursing staff has remained unchanged during the year with a total of three nurses working from the centre; two were qualified district nurses holding the district nursing certificate, undertaking home visiting care. The third nurse attended surgery sessions and worked part-time.

During the year 4,915 home nursing visits were made to 211 patients, 1,256 patients attended the surgery and received 4,691 treatments.

Development programme

Building work on the Beswick Health Centre, the second of the City's health centres, commenced in August 1971 and is scheduled for completion in July 1972. Subject to there being no unforeseen delays it is expected to be in full operation by August 1972.

The building is located in the Beswick comprehensive redevelopment area neighbourhood centre. Again, other community services have been or will be provided nearby.

The estimated cost of the Beswick Health Centre is £114,000 (erection and furniture). The health centre will provide the base for a comprehensive community health service and will accommodate eight general medical practitioners, local health authority family health services and school health services including dental and chiropody services.

Preparation of a scheme for health centres in certain designated comprehensive redevelopment area neighbourhood centres are well advanced.

Other schemes which have already been approved for inclusion in the City Council's four-year capital budget include health centres in Chorlton, Longsight and Levenshulme.

The health centres programme developed in collaboration with the Manchester Executive Council is as follows :—

<i>Health Centre</i>							<i>Date of Building</i>
Beswick	..	..	..	..	..	..	1971/2
Chorlton..	..	..	..	..	..	..	1973/4
Levenshulme	..	..	..	..	..	..	1973/4
Longsight	..	..	..	..	..	..	1973/4
Moss Side	..	..	..	..	..	..	1973/4
Clayton ..	..	..	..	..	..	..	1974/5
Harpurhey	..	..	..	..	..	..	1974/5
Moss Side West (Alexandra Park)				..	..		1974/5
Newton Heath		..	..	..	..	..	1974/5
Ladybarn	..	..	..	..	..	..	1975/6

Although many of the projects will be in redevelopment areas in the City, in line with the City Council's policy of according priority in the allocation of capital resources to projects in housing redevelopment areas, the City Council have been prepared to earmark funds for capital expenditure on health centres outside redevelopment areas. The projects for the Chorlton and Levenshulme areas are cases in point.

Care of Mothers and Young Children

Care of the unsupported mother

The care of the unsupported mother and her child was transferred from the Health Department to the Social Services Department on 26th May, 1971, but the medical supervision and assessment of babies to be placed for adoption and of prospective adoptive parents remained with the Health Department. One part-time health visitor continued to be engaged in this work and helped to co-ordinate the medical reports and enquiries from medical officers of the department, hospital and general practitioners regarding 61 babies for adoption and 120 prospective adoptive parents. Each of the babies underwent a comprehensive medical examination carried out by experienced Local Health Authority medical officers. Decisions were made regarding the medical suitability for the babies and prospective adoptive parents and the names of those found to be medically suitable were passed on to the Director of Social Services.

Medical supervision of Knowle House Mother and Baby Home was undertaken by a departmental medical officer although the Home itself had been transferred to Social Services Department in May.

Dental care of mothers and young children

The service occupied the equivalent of one dental officer. Comprehensive treatment was available at sixteen dental clinics and two dental caravans for all cases referred by the medical officers, general practitioners, and mothers seeking treatment for themselves or their children.

Brunswick Health Centre was opened in April providing a modern dental unit with two dental surgeries and including the new central dental laboratory for up to six dental technicians.

Treatment provided showed an increase over the previous two years, most of this increase coming from the Brunswick Health Centre where staff and patients benefitted from the very much improved working conditions and surroundings.

Dental care of children in "special schools"

Children in attendance at these schools due to their physical and/or mental handicaps are not amenable to dental treatment in the usual accepted manner. The majority were provided with comprehensive treatment under intravenous or intubation anaesthesia administered by a consultant anaesthetist.

Treatment given

Eighty-eight children had 210 fillings and 117 extractions under general anaesthesia.

Dental care of pupils at Mobberley Boys' School

There is a well equipped surgery available at the school. A dental officer attended the school as required to provide treatment.

Treatment given

Inspected
99

Needing treatment
23

Fillings
26

Extractions
2

Dental services for expectant and nursing mothers and children under 5 years

Part A Attendances and treatment

Number of visits for treatment during 1971

	Children 0-4 (incl.)	Expectant and nursing mothers
First visit	503	159
Subsequent visits	401	293
Total visits	904	452
Number of additional courses of treatment other than the first course commenced during year	64	6
Treatment provided during the year— number of fillings	510	320
Teeth filled	439	286
Teeth extracted	681	429
General anaesthetics given	254	56
Emergency visits by patients	26	9
Patients X-rayed	5	14
Patients treated by scaling and/or removal of stains from the teeth (prophylaxis)	125	84
Teeth otherwise conserved	57	—
Teeth root filled	—	1
Inlays	—	2
Crowns	—	6
Number of courses of treatment completed during the year	347	109

Part B Prosthetics

	Children 0-4 (incl.)	Expectant and nursing mothers
Patients supplied with full upper or full lower (first time)	3	36
Patients supplied with other dentures	1	33
Number of dentures supplied	5	92

Part C Anaesthetics

General anaesthetics administered by dental officers	—	166
------------------------------------------------------	---	-----

Part D Inspections

	Children 0-4 (incl.)	Expectant and nursing mothers
Number of patients given first inspections during year	549	164
Number of patients in A and D above who required treatment	433	161
Number of patients in B and E above who were offered treatment	431	161
Number of patients re-inspected during year	64	6

Part E Sessions

Number of dental officer sessions (i.e. equivalent complete half days) devoted to maternal and child health patients:

For treatment	450
For health education	10

“At Risk” register

This register was maintained to enable a special watch to be kept on infants who may have been subjected to an adverse influence either before, during or immediately after birth, such influence to include unfavourable family histories. The initial condition of these infants was normal in every respect, but they required careful supervision so that the earliest signs of a handicapping condition could be detected and treated.

Many infants on the “At Risk” register developed without any difficulty and their names could be removed when further supervision was no longer required. The names of the few who developed handicaps were also removed from this list and transferred to the handicapped list. Every effort was made by health visiting staff to ensure that these infants were examined regularly to assess their developmental progress.

This year, 1,011 infants were placed on the register for the following reasons:—

Birth weight below 4 lbs 8 ozs	134
Birth asphyxia and/or cyanotic attacks ..	364
Abnormal neurological signs, including convulsions, twitchings, meningitis and encephalitis	13
Apgar Score below 7 (when no other adverse factor has been reported)	355
Hyperbilirubinaemia	77
Adverse family history	68

The total number of children on the register at the end of the year was 2,571. During the year, 910 children were removed from the register for the following reasons:—

Normal development confirmed	550
Died	20
Removed from the City	320
Handicap diagnosed	20

Handicap register

The names of children known to have a disability of any kind were placed on a central register. Many of these children had more than one handicap.

Throughout the year special observationn was kept on all children on this list by both the centre medical officers and the health visitors in whose areas the children resided. Required visits were made by the health visitors who reported and discussed their findings with the centre medical officers. Each child’s progress was assessed against the background of its home and disabilities. Sometimes this required the medical officer to visit the family at home after obtaining the general practitioner’s consent. It was the aim of everyone dealing with these children to help them to develop to their fullest potential.

During the year 458 names were placed on the "Handicap" register for the following reasons. Sixty-five of these children had multiple defects.

Defect	Age of notification					Total No. of defects registered at 31st December 1971
	Under 6 months	6 months and under 1 year	1	2	3 and 4 years	
Defects of nervous system						
Mental retardation	1	1	8	5	19	81
Autism	—	—	—	—	1	1
Cerebral palsy	1	7	2	8	3	57
Epilepsy	—	—	3	1	6	46
Hydrocephalus	7	3	3	1	2	46
Spina bifida	8	—	3	2	—	44
Speech disorders	—	—	3	9	21	49
Other—delayed development	1	7	23	13	24	111
Diseases of the ear						
Partial hearing loss	—	1	11	7	21	59
Profound hearing loss	—	—	2	3	2	15
Other	—	—	—	1	—	3
Diseases of the eye						
Squint	—	3	11	12	13	70
Partial sight	—	3	—	1	4	21
Blind	—	—	—	—	—	2
Other	1	1	2	2	2	20
Defects of cardiovascular system						
Congenital heart disease ..	13	4	6	5	8	75
Other	1	1	1	1	1	12
Defects of respiratory system	1	5	4	6	14	46
Defects of alimentary system						
Hare lip	5	—	1	—	1	26
Cleft palate	6	—	—	—	1	27
Other	3	2	—	1	—	12
Nutritional and metabolic disorders						
Coeliac disease	—	1	1	3	—	13
Fibrocystic disease	1	4	—	1	—	9
Phenylketonuria	1	—	—	—	—	8
Other	1	—	7	3	5	21
Endocrine disorders						
Hypothyroidism	0	1	—	—	1	6
Diabetes	—	—	1	1	—	3
Other	1	—	—	1	1	4
Defects of urinogenital system	8	—	2	—	3	51
Diseases of the blood ..	—	—	2	—	1	9
Skeletal and muscular defects						
Talipes	24	—	1	1	—	65
Congenital dislocation of hip	6	1	2	—	—	19
Other	12	4	8	6	8	70
Skin diseases	4	1	2	1	1	22
Other disorders—mongolism	7	7	2	—	1	57
Totals	113	57	111	95	164	1,180 *

* One hundred and forty-four children had multiple defects.

Number of children on "Handicap" register 31st December, 1970—983.
Number of children on "Handicap" register 31st December, 1971—995.

During 1971, 454 cases were removed from the register, the reasons being given below :—

Died	..	..	..	..	..	..	18
Recovered	..	..	..	..	..	..	71
Removed from the City			..	..	..	..	138
Transferred to schools (5 years of age)					..	..	227

Under Section 34 of the Education Act, 1944, children who, because of a disability, may require special education in the school were referred to the School Health Section between the ages of 2 and 5 years. This year 232 such children were referred.

Notification of congenital malformations apparent at birth

During 1971 the total number of malformations reported as present at birth was 196, of which 172 were in live births and 24 stillbirths. Notification of these congenital malformations was made to the Department of Health and Social Security and uniformity of terminology was ensured by using the Department's classification.

	0	1	2	3	4	5	6	7	8	9	Total
	Central nervous system	Eye, ear	Alimentary system	Heart and great vessels	Respiratory system	Urogenital system	Limbs	Other skeletal	Other systems	Other malformations	
Live births ..	36	6	34	2	—	30	73	10	15	8	214
Stillbirths ..	24	—	5	—	—	2	3	—	1	1	36
Total	60	6	39	2	—	32	76	10	16	9	250

The 250 malformations classified above were in respect of 196 children of whom 54 were born with more than one malformation.

Nurseries and Child-Minders Regulation Act, 1948
Health Services and Public Health Act, 1968—Section 60

New registrations

Fifty-eight child-minders were registered or re-registered up to 26th May and thirteen persons on the register discontinued child-minding. Six premises were registered or re-registered as day nurseries and one discontinued as a private day nursery.

Particulars of premises and child-minders on the register are shown in the following table:—

		Premises registered				Child-minders registered			
		May 1971	Dec. 1970	Dec. 1969	Dec. 1968	May 1971	Dec. 1970	Dec. 1969	Dec. 1968
Number	.. ..	50	46	36	26	167	125	68	18
Number of places	.. ..	1,249	1,166	919	668	453	367	268	166

Steps taken by the Department to publicise the 1948 Act and its amended provisions included the display of printed notices in child health centres, day nurseries and on public buildings, and advice by health visitors to all persons known to be child-minding.

The need for a thorough investigation of the persons and premises to maintain a high standard of care necessitated visits and reports by a medical officer and a special public health inspector. The two public health inspectors working in co-operation with the Family Health Services on this particular aspect made 187 visits or revisits during the year investigating applications for registration.

Some applications were withdrawn when the applicants were advised that their premises were unsuitable; others took steps to bring them up to the required standards.

On 26th May, 1971, local health authority responsibilities, under the above Acts, were taken over by the newly formed Social Services Department.

Maternal and child health centres

Observations and assessment of the normal and abnormal development of children from birth has been one of the principal skills of local health department medical officers for many years. This skill has become the basis of developmental paediatrics which plays such an important part in a child's life today. The objective is that every child should be seen by a medical officer for health screening at regular intervals from birth so that deviations from the normal physically, mentally, or socially, may be identified at an early stage and an attempt made to cure or alleviate the condition.

Medical officers of the department have had long experience in this work. The new child health record card which is to be brought into use in 1972 will enable the results of their examinations and assessments to be computerised and compared with others at a later date.

Throughout the year medical officers undertook to co-ordinate and supervise all handicapped and "at risk" children in the areas of their child health centres. This meant regular discussions with health visitors and ensured that every child in need was given the benefit of medical and nursing skills, that screening procedures could be carried out at appropriate times and that further investigation and treatment could be instituted as soon as the need presented. Work with these children increased, the accent at all times being on developing the abilities of every child to its highest potential.

Clinics

Weekly clinics were held in the maternal and child health centres as follows—

Infants	..	..	..	..	88
Toddlers	..	..	..	..	28
Antenatal	..	..	..	..	24

Medical officers were in attendance at the above clinics, with the exception of 5 infant sessions and 20 ante-natal sessions which were taken by health visitors and midwives respectively. At antenatal clinics where medical officers were not in attendance, midwives, when necessary, continued the practice of taking blood specimen.

Physiotherapy

There was a substantial decline in the number of children referred to the school health service for physiotherapy treatment and the number of children referred for artificial sunlight treatment also showed a significant decrease.

Relaxation classes, each supervised by a midwife, continued to be held weekly at 14 selected centres throughout the City and at six other centres as required.

Domestic science classes

During the year the one cookery class was discontinued but the number of sewing classes held at the various child health centres remained unchanged—eight sewing classes being held weekly.

Each of the classes, supervised by a qualified teacher, proved to be of value to the regular attender. At the end of the year, however, one sewing teacher only was employed on a sessional basis.

Attendances

Attendances during 1971, with comparable figures for 1970, are given below :—

	1971	1970
Antenatal sessions		
New cases	1,233	1,626
All cases	1,717	2,199
Attendances	7,756	10,248
Post-natal sessions		
Cases	2	3
Attendances	2	3
Relaxation and mothercraft classes		
Attendances	1,027	1,383

There was again a fall in the number of attendances at the ante-natal clinics, and a corresponding reduction in the numbers attending the relaxation and mothercraft classes. This was attributed to the lower number of births occurring in the City and a corresponding reduction in the number of home confinements, with the availability of more hospital beds.

	1971	1970
Physiotherapy		
Attendances	80	269
Artificial sunlight		
New cases (children)	3	14
All cases	3	17
All treatments	6	124
Infant and toddler sessions		
Under 1 year	38,800	48,336
1–2 years	30,007 } 49,885 88,685	26,216 } 8,400 4,360 3,143
2–3 years		
3–4 years		
4–5 years		
	88,685	90,455

An analysis of the attendances at the infant and toddler sessions is given in the following table:—

Centre	No. of children who attended during the year and who were born in				No. of attendances during the year by children who were born in			
	1971	1970	1966/69	Total	1971	1970	1966/69	Total
Abbey Hey	389	410	463	1,262	4,024	1,095	999	6,118
Ancoats	97	81	54	232	763	237	111	1,111
Baguley	191	208	373	772	1,052	900	841	2,793
Brunswick (Ardwick)	128	129	170	427	539	434	279	1,252
Burnage	140	156	339	635	880	1,068	756	2,704
Charlestown	256	262	388	906	1,404	1,435	982	3,821
Cheetham	105	130	190	425	781	699	371	1,851
†Chorlton-on-Medlock	29	58	65	152	402	180	47	629
Chorlton-cum-Hardy	371	360	508	1,239	1,862	1,790	1,063	4,715
Clayton	167	198	288	653	1,054	426	431	1,911
*Collyhurst	197	144	170	511	1,521	515	461	2,498
Crumpsall	350	370	686	1,406	3,755	1,274	983	6,012
Darbishire House ..	252	307	367	926	927	1,294	696	2,917
Didsbury	227	260	632	1,119	1,496	1,643	1,236	4,375
Gorton	204	245	311	760	822	978	588	2,388
Harpurhey	294	269	269	832	1,735	1,286	1,460	4,481
Hulme	192	87	109	388	898	290	173	1,361
Levenshulme	463	505	776	1,744	2,120	2,396	1,457	5,973
Moss Side	472	532	616	1,620	3,268	2,815	1,209	7,292
Newton Heath	198	256	244	698	1,127	1,465	756	3,348
*Northenden	112	114	235	461	492	538	418	1,448
Northern Moor	157	167	296	620	849	647	526	2,022
Openshaw	144	215	352	711	759	1,323	746	2,828
Plant Hill	207	144	172	523	2,033	587	520	3,140
Wilbraham	177	197	287	661	810	984	669	2,463
Withington	289	316	382	987	1,730	1,861	786	4,377
Woodhouse Park ..	400	431	724	1,555	1,696	1,847	1,314	4,857
Totals	6,208	6,551	9,466	22,225	38,800	30,007	19,878	88,685

†Closed December
 *Includes sub-centre

Minor ailments

Seventy-two children under five years of age were referred by centre medical officers to the school health service for the treatment of minor ailments. Reasons for referral were as follows:—

Ear defects	1
Defective vision	14
Speech defect	24
Skin condition	21
Chiropody	1
Hearing tests	1
Enuresis	2
Others	8

Welfare foods

Welfare foods were obtainable at specified times from all of the 28 maternal and child health centres in the City. These facilities were also provided in the health clinic in the Town Hall extension.

National welfare foods (as distinct from proprietary welfare foods) were obtainable by anyone who presented the appropriate coupon and/or who was prepared to pay the appropriate cost. Proprietary foods costing less than the manufacturer's recommended price were also available to all mothers who regularly attended the child health centres. Proprietary foods were issued to families with low incomes without charge if, in the opinion of the medical officer, a particular proprietary food was medically essential for a child.

In 1971, the cost to the Corporation of free issues of proprietary foods was £52, compared with £23 in 1970.

Issues of national welfare foods were as follows :—

<i>Period</i>			<i>National dried milk—tins/ packets</i>	<i>Cod liver oil —bottles</i>	<i>A. & D. vitamin tablets— packets</i>	<i>Orange juice —bottles</i>	<i>A. & D. drops</i>
1966	..	..	68,643	9,738	6,303	90,285	—
1967	..	..	56,984	11,153	5,809	93,180	—
1968	..	..	37,969	7,958	5,109	82,170	—
1969	..	..	21,317	6,984	5,067	84,958	—
1970	..	..	14,306	7,463	5,344	94,255	—
1971	..	..	11,521	5,741	4,316	91,556	8,221

These figures exclude issues to hospitals, day nurseries and non-maintained schools.

Voluntary workers

Much appreciated voluntary assistance at maternal and child health centres was given by eight ladies who made 151 attendances.

Mothers' clubs

There has been a gradual dwindling of attendances at the various mothers' clubs run at child health centres and because of this the number of clubs themselves has been reduced. Making a general appraisal of the situation it has been agreed that it is uneconomic to run these clubs, especially since it is

- (a) difficult to obtain suitable instructors
- (b) the subjects, such as cookery and dressmaking are catered for by afternoon or evening classes run by the Education Department.

The last remaining club is expected to cease functioning early in 1972.

Prevention of Illness, Care and After Care

Chiropody

Demand for the chiropody service provided by the Health Department increased steadily during the year, throwing an increased work load on to the chiropody staff.

An outstanding feature of the year was the involvement of full-time members of the chiropody staff in the treatment of school children following the integration of the School Health Service with the Health Department. Two thousand and twenty-four treatments were given during the year. This new category of patient should give added work-interest, help to retain the present staff and encourage other young chiropodists to seek employment within a progressive chiropody health team.

The service was much appreciated by the elderly, physically handicapped and expectant mothers whose mobility and comfort was increased by the treatment they received. Patients leaving the clinic after treatment expressed their thanks in several ways, to quote two expressions: "Life is worth living when your feet are comfortable", or "I feel as if I am walking on air now".

Wherever possible patients were encouraged to attend clinics and domiciliary treatment was only provided for patients who found it physically impossible to reach the clinic.

The number of persons on the waiting list for treatment at the end of the year was 725, 586 were waiting for clinic appointments and 139 for home visits, an increase of 103 and 95 respectively compared with the same time last year. This increase occurred despite additional chiropodial sessions being introduced at Gorton, Wythenshawe, Baguley and Collyhurst sub-centre and the provision of the service at the new Brunswick Health Centre and the Hulme Child Health Centre.

Plans to expand the service to meet the increasing demand for chiropody were under discussion at the end of the year.

The chiropody service was staffed by eleven full-time chiropodists, including the Chief Chiropodist, an increase of three during the year. In addition, 21 private chiropodists, a decrease of four during the year, undertook clinic sessions and/or domiciliary visits.

The following statistics give an indication of the volume of work undertaken by the chiropody section:—

Patients on the register at 31st December in 1969, 1970 and 1971

Receiving treatment	Elderly persons			Physically handicapped persons			Expectant mothers		
	1969	1970	1971	1969	1970	1971	1969	1970	1971
At municipal clinics ..	4,096	4,848	5,529	39	55	67	1	2	4
At home ..	2,686	3,142	3,211	77	88	101	—	—	—
Total	6,782	7,990	8,740	116	143	168	1	2	4

Treatments given

Treatment received						Number of treatments (all classes)		
						1969	1970	1971
At municipal clinics						14,227	15,920	17,749
At home						9,680	11,179	12,229
Total						23,907	27,099	29,978

One voluntary organisation provided chiropody treatment in the City on an agency basis. The number of patients receiving treatment from this source was 515.

This organisation had a staffing problem and it was necessary for the Health Department chiropodists to assist by staffing two weekly sessions throughout the year.

Close liaison was maintained with family doctors, the staffs of other sections of the Health Department and the Social Services Department.

Convalescence

Patients were sent for recuperative holidays to the following homes :—

Dr. Garrett Memorial Home, Conway (Children aged 2–5 years)	.. .. .	35
Delton Convalescent Home, Blackpool (Adults)	.. ..	14
Seabright Convalescent Home, St. Annes (Adults)	..	2
Lear Home of Recovery, West Kirby (adults)	.. ..	22
“Binswood”, British Red Cross Home, Didsbury, Manchester (Adults)	.. .. .	84
Knowle House mother and baby home, Handforth (Convalescent mothers with babies)	.. .. .	6
Jewish Blind Society’s Home, Southport (Adults)	..	17

Patients were referred for a recuperative holiday by their general practitioner or by local health authority staff in the course of their routine visits. All adult patients were visited by an experienced member of the health visiting staff to decide which type of convalescent holiday home available was suitable.

Patients accepted for a seaside holiday must be fit to travel to the holiday centre by public transport and not require any nursing or medical care.

Frail patients and those who were housebound were offered a place at “Binswood” provided they were not incontinent and were able to look after themselves.

Six mothers were offered and accepted a recuperative holiday at Knowle House mother and baby home. This facility was of value to mothers with a young child who needed a recuperative holiday but did not wish to be separated from their child.

Pre-diagnostic screening tests

Metabolic disease of the newborn

The investigations for detection of metabolic diseases of the newborn has continued as in 1970.

During the year a total of 9,279 specimens were obtained mainly by the domiciliary midwifery staff although some were taken by hospital staff and health visitors. No case of phenylketonoria was detected in 1971.

Congenital dislocation of the hip

Congenital dislocation of the hip, if untreated, produces an obvious and tragic disability. The success of the treatment depends on the age at which the condition is diagnosed. The earlier treatment is started the better the prognosis, and the shorter the duration of the treatment.

All domiciliary midwives within the City carried out "Barlow's" test at the first examination, usually within one hour after birth. Doctors at the maternal and child health centres performed one of the standard tests for diagnosing congenital dislocation of the hip at the baby's first visit to the centre.

During 1971, the names of ten children with this condition were placed on the "handicap" register.

Screening tests of vision

The orthoptist of the School Health Service visited 24 day-nurseries during the year to test the vision of three-to-five-year-olds. Most of the tests were by the Sheridan Gardner method but in some case Beale Collins or 'E' test methods were used.

Four hundred and ninety-six children were tested, of whom 437 had normal vision. The remaining 59 had defective visual acuity, which required reference to the Consultant Ophthalmologist, at the Royal Eye Hospital who kindly undertook full diagnostic testing. It was found that 18 children had strabismus and 50 required a prescription for glasses, the reasons for this including hypermetropia, myopia and nystagmus. In eight cases defective vision was found in one eye only. All the children were given follow-up appointments at the Royal Eye Hospital. The day nursery staffs were most co-operative in seeing that glasses were worn. This support was not always given by parents. The orthoptist followed up the cases in the nurseries herself and reported on two rather interesting cases. One boy, aged four years, noted in his nursery for lack of interest in books, was found to be highly hypermetropic. Once glasses were prescribed and worn, this child took a normal interest in books etc., this being a good preparation for his school entrance. Another boy, noted to be constantly falling and bumping into large toys etc. was found to be highly myopic. Again glasses resolved the situation.

This worthwhile screening test of vision will be continued in the future.

Screening tests of hearing

There was a further increase in the facilities for screening tests of hearing during the year. Tests were carried out at twenty-five centres, and the number of sessions allocated to this work was increased by two-hundred resulting in more children being screened. Children who failed the test were referred for diagnosis to either the Department of Audiology or to Shawbrook School for partially hearing children.

As in previous years, a training course was conducted by members of the Department of Audiology in one of the child health centres where health visitors and school nurses were trained in the basic techniques of screening tests of hearing. Sessions were supervised by experienced health visitors who had attended an advanced course of training at the Department of Audiology.

Summary of screening tests undertaken

Centre	No. of sessions	No. of children tested	No. of children passed	No. of children awaiting re-test	Referred to Dept. of Audiology and Shawbrook School for the partial hearing children
Abbey Hey	68	535	508	15	12
Ancoats	24	77	72	5	—
Baguley	33	171	163	8	—
Brunswick.. ..	33	173	149	21	3
Burnage	12	124	118	6	—
Charlestown Road ..	51	322	310	10	2
Chorlton-cum-Hardy ..	43	266	236	24	6
Clayton	21	135	118	15	2
Collyhurst	29	178	174	3	1
Crumpsall	89	581	473	74	34
Darbishire House ..	49	346	340	5	1
Didsbury	25	243	225	15	3
Gorton	15	128	120	5	3
Harpurhey	49	236	221	9	6
Hulme	53	208	192	16	—
Levenshulme	45	440	420	—	20
Moss Side.. ..	97	531	494	25	12
Newton Heath	40	256	255	—	1
Northenden	30	116	94	15	7
Northern Moor	21	131	127	—	4
Openshaw	29	158	146	11	1
Plant Hill	34	170	167	—	3
Surrey Lodge G.P. ..	24	148	137	8	3
Withington	38	301	280	17	4
Woodhouse Park ..	63	431	408	16	7
Totals	1,015	6,405	5,947	323	135

Diabetes

An average of nine new diabetic patients per month was admitted to the district nurses' visiting list. The majority of these patients were women over 60 years of age who required daily and sometimes twice daily injections of insulin. A number of these patients with encouragement and support successfully learned to give their own injections and carry out a simple urine test as well as maintain a controlled diet. In this way, a sense of independence and achievement was produced which helped to raise the patients' morale.

District nurses made routine urine tests for all new patients; this was a very simple procedure. During the year two patients were found to have previously undiagnosed glycosuria. In each case the finding was passed to the patient's general practitioner, who referred the patient to hospital for further investigation.

Cervical cytology

Cervical cytology continued to be an integral part of the Health Department's programme, regular weekly sessions being devoted to this work at clinics in all parts of the City. Special clinics were again arranged on industrial premises, in hospitals and in offices.

Despite this provision, the response of women to have the cyto test was disappointing and means of increasing this response were considered and investigated. One method proving useful in industry was as follows:—

When an industrial concern agreed to offer the test to its employees, a senior medical officer visited the personnel officer to discuss details as in previous years, but this year a personal letter from the Medical Officer of Health was left for each employee. This letter invited women to have the test and incorporated a short questionnaire which was returned for scrutiny to the Health Department. Information was requested as follows:—

- I wish to have a test.☐
- I have had the test within the past two years.☐
- I do not wish to have the test☐

In the case of persons not wishing to have the test they were asked if they would indicate their reasons for refusal.

This work commenced in the latter part of the year so that insufficient evidence was available to give an overall picture of the results in this year's report, but preliminary scrutiny revealed that the number of women presented for the test was substantially higher than would have been expected without this approach.

Further information was being gathered in an effort to find out those methods of publicity which encourage most women to have the test. Each clinic patient was asked her first source of information about the test, e.g. from posters in doctors' surgeries, clinics and in buses (posters had been placed in these by the Local Co-ordinating Committee for Population Screening for Cancer of the Cervix), from professional sources (doctors, nurses, etc.) and from the press, radio and television. By far the largest number had their initial information from professional workers and clinic posters.

During the year a total of 10,028 cytological examinations were effected and of these 4,411 were carried out on women who had not previously been tested.

A total of twenty positive smears was reported, eight being found in women being tested for the first time. In addition vaginal infection was found in 689 cases and pelvic examination revealed 2,728 other abnormalities.

1. Local Authority clinics
(a) Distribution of cytodiagnostic results by age groups 1971

	Under 20 years	20/29 years	30/39 years	40/49 years	50/59 years	60 years and over	No age given	Total
New smears	359	1,439	754	371	193	41	4	3,161
Repeat smears	119	1,223	1,360	1,238	734	168	—	4,842
Negative smears	477	2,643	2,087	1,600	920	209	4	7,940
Positive smears	—	3	9	3	4	—	—	19
Suspicious smears	1	16	18	6	3	—	—	44
Total	478	2,662	2,114	1,609	927	209	4	8,003

(b) Cervical smears obtained from 1964 to 1971 at Local Health Authority clinics

	1964	1965	1966	1967	1968	1969	1970	1971
Negative smears ..	2,364	3,081	3,754	4,065	5,402	5,379	6,835	7,940
Positive smears ..	16	34	29	38	41	34	20	19
Suspicious smears ..	17	35	60	141	118	67	36	44
Total	2,397	3,150	3,843	4,244	5,561	5,480	6,891	8,003

Cervical smear tests continued to be carried out at regular sessions at maternal and child health centres throughout the City and were also included in the facilities provided at the Department's family planning clinics. A total of 8,003 tests were carried out and of these 3,161 were initial tests. Positive smears was reported in nineteen cases representing an overall incidence of 2.37 per 1,000 of all tests taken in the clinics. Patients whose tests proved positive were immediately referred to their general medical practitioners for necessary treatment. Repeat smears were taken in 4,842 instances representing 60.50 per cent of all tests effected during the year at local health authority clinics.

2. Tests taken at industrial premises**(a) Distribution of cytodiagnostic results by age-groups 1971**

	Under 20 years	20/29 years	30/39 years	40/49 years	50/59 years	60 years and over	No age given	Total
New smears	107	481	168	220	243	27	4	1,250
Repeat smears	1	110	116	254	268	26	—	775
Negative smears	108	590	282	470	507	53	4	2,014
Positive smears	—	—	—	1	—	—	—	1
Suspicious smears	—	1	2	3	4	—	—	10
Total	108	591	284	474	511	53	4	2,025

(b) Cervical smears obtained from industrial premises 1968–1971

	1968	1969	1970	1971
Negative smears ..	5,826	3,668	1,994	2,014
Positive smears	28	17	6	1
Suspicious smears ..	19	25	5	10
Total	5,873	3,710	2,005	2,025

The practice of offering facilities to firms within the City so that their employees could be tested at their place of employment was continued and although the general response to the department's approach was disappointing nevertheless a total of nineteen firms were visited and 2,025 women were tested, 1,250 being tested for the first time.

Only one positive smear was reported representing an overall incidence rate of 0.49 per 1,000 the rate being considerably less than that of clinic patients.

3. Distribution of total number of cytodiagnostic results by age groups 1971

	Under 20 years	20/29 years	30/39 years	40/49 years	50/59 years	60 years and over	No age given	Total
New smears ..	466	1,920	922	591	436	68	8	4,411
Repeat smears ..	120	1,333	1,476	1,492	1,002	194	—	5,617
Negative smears	585	3,233	2,369	2,070	1,427	262	8	9,954
Positive smears ..	—	3	9	4	4	—	—	20
Suspicious smears	1	17	20	9	7	—	—	54
Total ..	586	3,253	2,398	2,083	1,438	262	8	10,028

4. Other abnormalities found in 1971

	Industrial	Clinics	Total
Trichomonas	50	331	381
Monilia	43	265	308
Erosion	377	1,092	1,469
Polyps	35	121	156
Cervicitis	77	223	300
Inflammatory changes ..	6	31	37
Fibroids	—	1	1
Prolapse	—	5	5
Other, e.g. cysts, etc... ..	2	69	71
Total	590	2,138	2,728

Haemodialysis in the home

Adaptations of homes to install artificial kidney machines

In 1968, the then Ministry of Health informed local authorities that conversions of or adaptations to domestic premises for the purpose of installing artificial kidney machines for the treatment of chronic kidney failure could be carried out under Section 28 of the National Health Service Act, 1946. In that year the City Council authorised necessary adaptations up to a limit of £300 per home and one such home was adapted for home dialysis.

Following requests from the Medical Director of the Artificial Kidney Unit at Withington Hospital, arrangements were made for the haemodialysis organiser from the hospital and a representative from the Health Department to meet patients and their relatives in their own homes to discuss the necessary adaptation requirements.

The room chosen for the installation of the kidney machine must be suitable and it must be large enough for a single bed plus the dialysis equipment and supplies. There may be need for additional electrical wiring to meet the demands of the dialyser machine which requires a 30 amp. supply. There must be a direct supply of hot and cold water to a sink, which should be large enough to enable the artificial kidney to be entirely immersed. The walls and ceiling of the room should be washable and the floor covered with waterproof material. Adequate drainage of waste material is essential and additional plumbing may be necessary. Shelving is required for the storage of dressings and concentrated fluids.

Estimates for the work entailed, were obtained from the Corporation's Direct Works Department. The cost of alterations carried out at each home was within the figure authorised by the City Council. The satisfactory completion of the work in each instance was undoubtedly due to the good liaison between the representatives of the Health and Direct Works Departments and the haemodialysis administrator at the Artificial Kidney Unit.

The expensive dialysis machines and equipment were provided and maintained by the South Manchester Hospital Management Committee who were responsible for the cost of the extra electricity consumed and, where one was not already installed, the installation and rental of a telephone. Considerable work was entailed by the staff at the Kidney Unit with regard to maintenance and frequent distribution of supplies to service each patient's machine.

Home dialysis freed the hospital from the routine work of dialysis but considerable hospital training of both the patient and the relatives was involved before transfer to home dialysis. Treatment at home was supervised by the Kidney Unit staff until the patient and relatives were fully acquainted with the procedure. Patients who are suitable for home dialysis can receive treatment in their own home indefinitely or until they have had a successful kidney transplant.

Renal dialysis which could, at home, more conveniently be carried out in the evenings, was usually necessary every two days. Home dialysis not only saved on hospital beds, but also saved the patients travelling time and the

period of separation from other members of the family. Patients received treatment in the relaxed atmosphere of the home environment and they led a reasonable family life. The risk of cross-infection in home dialysis was minimal compared with dialysis in hospital and the cost of domiciliary haemodialysis to the community as a whole was far less than that of hospital treatment.

At the end of the year 8 patients were receiving kidney treatment in their own homes. During 1971 one application was received and one home was in the process of being adapted for home dialysis at the end of the year.

It is pleasing to record that the first patient to receive home dialysis in the City having had a successful renal transplant, married and at the end of the year was leading a normal family life in a house of his own.

Laundry service

Applications for this service, available to chronic sick persons nursed at home, decreased during the year, 97 patients being supplied compared with 141 in 1970. This decrease was offset by a much greater demand for other means of dealing with incontinence as noted later in this report.

Free loan of laundered bed linen and/or night attire was arranged, deliveries and collection of soiled articles being made twice weekly.

The laundry work continued to be carried out in a most satisfactory manner at Springfield Hospital.

Disposable absorbent paper pads were supplied as an alternative to linen draw sheets to elderly patients who, were incontinent at night, and also to patients who were doubly incontinent. These pads proved of considerable help in fulfilling the needs of these particular patients and during the year 2,351 patients received benefit from this service.

The problem of disposal of the soiled pads was overcome outside smoke control areas by burning on domestic fires and in incinerators, or provided they were well wrapped, by the normal refuse disposal services. To this end, large incinerators capable of dealing with the soiled pads were incorporated into all purpose-built Health Centres, Maternal and Child Health Centres and combined clinics in the City, and were provided at various Maternal and Child Health Centres already in existence.

Protective pants and interliners were supplied free of charge to 204 necessitous disabled persons compared with 157 in 1970. This service was available to handicapped persons on the recommendation of either a general medical practitioner or a district nurse.

Loan of sickroom equipment

The loan of sickroom nursing requisites continued to be available free of charge on application either directly to the Health Department or to a district nurses report centre, such applications being substantiated by a doctor, district nurse, health visitor or midwife.

During 1971 there was a decrease in the numbers of persons applying for the service, 1,895 applications being received as compared with 1,996 in 1970.

Tuberculosis

Tuberculosis is by no means a rare disease in Britain. It still causes more deaths per annum than any of the other communicable diseases, with the exception of influenza in an epidemic year.

In England in 1970, 11,280 cases of all forms of tuberculosis were notified (6,998 males and 4,282 females), with in addition 367 deaths of tuberculosis persons not notified before death.

Deaths in England in 1970 from all forms of tuberculosis numbered 1,465 (819 respiratory and 646 non-respiratory). Nearly one-third of the respiratory tuberculosis deaths were due to the late effects of the disease after the tuberculosis process had healed.

The following table indicates the percentage reduction in notifications and deaths in Manchester in the periods 1921-41, 1941-61, and 1961-71.

Percentage reduction of tuberculosis in periods specified

Period	All forms			Respiratory			Non-Respiratory		
	1921-41	1941-61	1961-71	1921-41	1941-61	1961-71	1921-41	1941-61	1961-71
Deaths ..	35	93	37	30	92	39	54	96	20
Notifications	43	66	43	39	61	47	53	85	8

The dramatic reduction in deaths in the period 1941-61 was mainly related to the advent of chemotherapy.

Tuberculosis—district nurse

Over the years tuberculosis has been a disease which district nurses have frequently treated in the home. They were often called upon to give intensive nursing care in the terminal stages of the illness. The principles of barrier nursing were observed in their rigour:—the nurse in gown, cap, mask, gloves; the patient isolated as far as possible, with separate utensils including crockery kept for each.

How different the picture is today! Tuberculosis is no longer the killer disease which it used to be and the incidence is greatly reduced. General nursing care now is rarely necessary. Following a period in hospital the patient is discharged on drug therapy and has no need to remain in bed. The district nurse attends mainly to give a course of injections and carry out general health supervision. This can go on for several months to ensure the illness is brought completely under control.

During the year, the supervision of 5 cases, 3 men and 2 women who had been adamant in their refusal to have treatment in hospital or at home, was taken over by district nurses. All were open cases of tuberculosis whose organisms had become resistant to drugs through their own neglect to follow up their treatment adequately. New drugs had been prescribed by the hospital consultants but unless these were administered regularly over a long period, the same resistance would have been developed by the organisms.

District nurses undertook to make twice daily home visits at specific times to these patients. By the end of the year two had completed their treatment and were able to be discharged. They had come to realise the wisdom of regular supervision and were motivated to attend hospital for this. The other three patients were still receiving treatment at home and were co-operating with the nursing staff.

Tuberculosis health visiting

Two liaison health visitors maintained contact between the Chest Clinic and the health visitors on the areas, keeping the latter informed of patients' progress and their regular or failed attendance at the Chest Clinic, as well as of cases with positive sputum living in the community who were in need of domiciliary follow-up visits.

These two experienced liaison health visitors at the Consultant Chest Physicians' request made many visits to homes to investigate social backgrounds of patients who were reluctant to accept hospital treatment or who perhaps refused to take the prescribed drugs and thus hindered their early recovery. They also carried out Tine tests on contacts under the age of 21 years, sometimes having to make visits to their place of employment.

B.C.G. vaccinations

In 66 sessions 830 pre-vaccination Heaf tests, 658 B.C.G. vaccinations and 597 conversion Heaf tests were carried out. In addition to contacts of tuberculosis cases, patients included newly arrived immigrant children, school children who had missed appointments at school, and student nurses and other hospital staff.

Home helps

A home help can be of invaluable assistance in a tuberculous household. Staff who undertook this work were volunteers and arrangements for them to have chest X-ray examinations were made every two years. Their period of duty was limited to three months in active tuberculosis cases. Seven patients suffering from tuberculosis were given help during the year.

Department of Health and Social Security

Financial anxiety was frequently a burden to the family containing a patient suffering from tuberculosis and officers of the Department of Health and Social Security were understanding and sympathetic in providing financial assistance to those in need.

Food grants

Supplementary milk and food grants were made to tuberculous patients whose income fell below a scale laid down by the Health Committee. This scale is periodically revised and at the end of the year was as follows:—

One adult (single or widow)	£6.50
One parent and one child	£8.50
Two adults	£10.00
Two adults and one child	£12.00
(Plus £2.10 for each additional child)	
(Plus 50p to persons receiving supplementary pensions)	

An allowance was made for rent where this exceeded 75p per week. Sixty-two grants were made during the year.

Housing

Sixty-one applications for rehousing on medical grounds were referred by the Housing Survey Section of the Health Department. In every case a medical report was received from the consultant chest physician and a home conditions report was submitted by the health visiting staff to the Medical Officer of Health, who subsequently recommended rehousing in forty-eight cases.

Colonisation

The Health Committee assumes financial responsibility for the maintenance of patients accepted by village settlements after a period of observation. At 31st December, 1971, there was one patient in Barrowmoor Hall Tuberculosis Colony, and one in Papworth Village Settlement, Cambridge-shire.

Loans

A small legacy bequeathed to the Corporation for the purpose of helping tuberculous patients, made possible the gift of bedding and clothing to nine needy patients. In order to safeguard the isolation of patients nursed at home, bed and bedding were loaned as necessary and any articles required for nursing care were loaned at the request of the domiciliary nurses.

Sputum boxes were distributed free of charge and premises, beds and bedding were disinfected without cost to the patient.

Notification

On 31st December, there were 2,726 persons on the Tuberculosis Notification Register and 74 Manchester patients were receiving treatment in hospitals and sanatoria. New cases of respiratory tuberculosis notified increased from 194 in 1970 to 202 in 1971. There were 134 male cases (126 in 1970) and 68 female cases (68 in 1970). In addition, the Medical Officer of Health was informed of 12 cases (18 in 1970) of respiratory tuberculosis from local registrars' death returns and 9 cases (4 in 1970) by posthumous notification.

New cases of non-respiratory tuberculosis decreased from 38 in 1970 to 36 in 1971. There were 15 male cases (19 in 1970) and 21 female cases (19 in 1970). In addition, the Medical Officer of Health was informed of one posthumous case (none in 1970) of non-respiratory tuberculosis.

Tuberculosis (pulmonary and non-pulmonary)
Incidence and deaths in age groups for years 1921, 1941, 1961, 1965 - 1971

Year	0—				1—				5—				15—				45—				65—				Total				Totals	
	Pul.		Non-pul.		Pul.	Non-pul.			Pul.	Non-pul.			Pul.	Non-pul.			Pul.	Non-pul.			Pul.	Non-pul.			Pul.	Non-pul.			All forms	Deaths
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
1921 ..	10	4	16	20	39	16	91	61	203	25	226	64	924	604	173	89	376	283	31	17	46	35	8	1	1598	967	545	252	2143	1219
1941 ..	3	—	3	2	14	5	46	35	36	6	68	18	610	366	124	42	266	241	13	11	39	61	4	7	968	679	258	115	1226	794
961 ..	—	—	—	—	15	—	2	—	27	—	3	—	178	2	27	2	139	31	4	3	23	17	3	—	382	51	39	5	421	56
1965 ..	2	—	—	—	11	—	1	—	13	—	2	—	143	4	31	—	106	20	14	2	28	21	1	—	308	45	49	2	357	47
1966 ..	—	—	—	—	12	—	1	—	13	—	2	—	139	3	24	1	82	22	6	1	31	17	4	1	277	42	37	3	314	45
1967 ..	1	—	—	—	8	—	—	—	144	—	1	—	144	5	17	—	77	19	5	1	23	18	4	1	265	42	27	2	292	44
1968 ..	2	—	—	1	18	—	2	—	130	—	5	—	81	4	25	3	63	17	5	3	26	15	1	1	261	36	38	7	299	43
1969 ..	—	—	—	—	5	—	—	—	17	—	10	—	88	2	43	1	55	12	3	9	19	9	8	6	177	23	68	17	245	40
1970 ..	1	—	—	—	8	—	1	—	16	—	2	—	94	4	28	—	58	10	6	—	23	21	1	—	194	35	38	1	232	36
1971 ..	—	—	—	—	7	—	—	—	14	—	2	—	94	3	25	3	60	7	4	—	27	21	5	—	202	31	36	4	238	35

Summary of notifications of tuberculosis during the
period 1st January to 31st December, 1971

FORMAL NOTIFICATIONS															
Number of primary notifications of tuberculosis (new cases) by age															
	0-1	1-	2-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75-	Total (all ages)	
Respiratory, males ..	—	—	3	5	2	6	13	15	22	27	21	17	3	134	
Respiratory, females ..	—	2	2	4	3	7	12	13	6	4	8	3	4	68	
Non-respiratory, males ..	—	—	—	—	1	2	2	1	7	—	1	1	—	15	
Non-respiratory, females ..	—	—	—	1	—	—	2	6	5	2	1	1	3	21	

Primary notifications of and deaths from tuberculosis
Comparative figures for years 1968-1971
(Rates per thousand of the population)

Year	Primary notifications						General death rate Manchester		Death rate all respi- ratory diseases except tuberculosis (M/cr.)		Death rates, tuberculosis Manchester				Death rate, respiratory tuberculosis, England and Wales	
	Respiratory				Non-respiratory		M.	Rate	F.	Rate	Respiratory		Non-respiratory		Per- sons Rate	Per- sons Rate
	M.	Rate	F.	Rate	M.	Rate					F.	Rate				
1968	0.59	0.29	0.43	0.05	0.08	0.06	12.68	1.92	0.10	0.02	0.06	0.01	0.01	0.01	0.030	
1969	0.44	0.17	0.30	0.10	0.13	0.12	12.70	1.99	0.07	0.01	0.04	0.05	0.01	0.03	0.022	
1970	0.44	0.22	0.33	0.07	0.06	0.06	12.57	2.09	0.10	0.03	0.06	—	0.00	0.00	0.019	
1971	0.51	0.24	0.37	0.06	0.07	0.07	13.15	1.94	0.09	0.02	0.06	0.01	—	0.00	0.019	

Source of notification of tuberculosis

Source	Respiratory		Non- respiratory		Totals
	M.	Rate	F.	Rate	
Private practitioners	7
Manchester chest clinic	127
Baguley chest clinic	8
Other chest clinics	—
Manchester hospitals	94
Other hospitals	2
Totals	238

Of the 238 notifications of all forms of tuberculosis in 1971, 49 referred to Commonwealth immigrants and 3 to European and other immigrants. The notification rates were:—1·86 per 1,000 population for the Commonwealth and other immigrants* and 0·36 per 1,000 population for the remaining residents of Manchester.

**estimated population in Manchester, 28,000. The population of persons of the various nationalities is not known.*

The nationality, age and sex distribution of the Commonwealth and other immigrant cases notified was:—

Age group years	Commonwealth												Non- Commonwealth			
	Caribbean		Indian		Pakistani		Asian		African		Other		European		Other	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
0-4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-15	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
16-40	3	3	4	4	11	9	1	1	0	0	0	0	0	0	1	0
41-60	2	1	1	0	1	2	1	0	0	0	0	0	0	1	0	0
over 60	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0
Total	5	4	5	4	15	13	2	1	0	0	0	0	2	0	1	0

The duration of residence in Manchester of the Commonwealth and other immigrant cases notified was:—

Years of residence at onset of illness	Number of notifications
0–	6
1–	7
2–	12
5–	15
10 and over	12
Total	52

Of the 36 new cases of non-respiratory tuberculosis notified in 1971, 17 were Commonwealth and other immigrants, whose country of origin was Pakistan (9), India (3), the Caribbean (3), China (1) and Poland (1).

The site of disease in these 17 cases notified was neck glands (6), meninges (3), vertebral column (2), abdomen (1), jaw (1), chest wall (1), genito-urinary tract (1), bones and joints (1) and upper extremity (1). In the remaining 19 cases, the site of the disease was neck glands (8), genito-urinary tract (4), abdomen (5), upper extremity (2).

As in previous years, a small, but by no means unimportant, number of cases of tuberculosis were first notified after death. Of the 21 notifications of respiratory tuberculosis in this category, 3 were females and 18 were males.

The females were 62, 63 and 67 years of age respectively. The 18 males were distributed by age as follows:—one 27 years, one 39 years, one 48 years, two 57–58 years, six 64–70 years, five 73–79 years and two over 80 years. There was one posthumous notification of non-respiratory tuberculosis—a male aged 62 years.

Mortality

Deaths from respiratory tuberculosis numbered 31, four less than in 1970' consisting of 7 females and 24 males. Four males died from non-respiratory tuberculosis compared with one female in 1970. Of the 31 deaths from respiratory tuberculosis, 30 were the result of active disease and only one due to late effects of tuberculosis. Of the 4 deaths from non-respiratory tuberculosis one resulted from disseminated tuberculosis and the site of disease in the remaining 3 was bones and joints (1), adrenal glands (1), and peritoneum (1).

The age and sex distribution of the tuberculosis deaths was:—

Age in years	Respiratory		Non-Respiratory	
	Male	Female	Male	Female
0–	0	0	0	0
15–	0	0	0	0
25–	0	0	2	0
35–	3	0	1	0
45–	2	0	1	0
55–	4	1	0	0
65–	10	2	0	0
75–	5	4	0	0

Mass radiography health survey

The following report has been supplied by Dr. J Rimmington, Medical Director of the Mass Radiodgraphy Service—Southern Division.

During the year the two Units of the Southern Division of the Mass Radiography Service visited the following establishments within the City of Manchester.

- Basement Clinic, Manchester Town Hall,
- John Dalton College,
- Elizabeth Gaskell College,
- St. George's Church Hall, Miles Platting,
- St Stephen's Church Hall, Harpurhey,
- Hebrew Congregation, Cheetham,
- Higher Crumpsall Liberal Club, Crumpsall,
- T.A.V.R. Drill Hall, Rusholme,
- St. Christopher's Church Hall, Withington,
- H.M. Prison,
- Church of Latter Day Saints, Northenden.

In addition, visits were also made to 19 industrial and business concerns and to 6 establishments for the examination of tuberculosis contacts.

Employees of numerous firms and organisations in the immediate vicinity of most of these centres were X-rayed. Members of the general public residing in the following municipal wards were invited to attend specially arranged sessions: Miles Platting, Hugh Oldham, Harpurhey, Cheetham, Crumpsall, Rusholme, Old Moat and Northenden. All householders residing in these wards were sent a letter from the Medical Officer of Health indicating the centres together with the dates and times of the sessions, and urging them to take advantage of the mass radiography facilities. In addition, the surveys were publicised by means of posters and leaflets in shops, libraries, church halls and other buildings.

The results of the surveys are summarised in the tables on pages. Table I is based on a ten per cent sample of the record cards completed during the survey. The table is not strictly accurate in detail, but is sufficient to give a fairly correct indication of the age and sex distribution of the various examinee groups attending the Unit. The other tables are strictly accurate, having been compiled from the individual record cards, but it should be noted that about 10 per cent of the abnormal cases were not fully diagnosed when this report was compiled and they have been included under the most likely classification.

Comments

- (1) Total examinations increased to 26,630 during 1971 compared with 22,700 in 1970. A gratifying increase was in the general practitioner cases group which increased 100 per cent.
- (2) The number of cases of pulmonary tuberculosis requiring treatment or close observation was 52 compared with 53 in 1970 and, consequently, with the rise in total examinations the discovery rate was lower at 1.95 per thousand examinations compared with 2.34 in 1970. As usual, the general practitioner cases and contacts produced the highest rates (8.05 and 4.34 per thousand, respectively). Nevertheless, the rates for public and industrial examinations (0.93 and 1.19 per thousand, respectively) were much above the average for the Region and the U.K. as a whole.
- (3) Unfortunately, the number of malignant neoplasms found continued to rise—44 compared with 39 in 1970. Practically all were in cigarette smokers.
- (4) Many other significant abnormalities were found and referred for treatment, e.g. 92 cases of heart disease and 107 simple inflammations of the lung.

All the abnormalities detailed in the Tables were referred for investigation or treatment either to Chest Physicians, Thoracic Surgeons, Cardiologists or general practitioners.

Supplementary mass radiography report

The Manchester Hospital Board's Mass Radiography Service (Southern Division) continued to hold regular chest X-ray sessions in the Basement Clinic of the Town Hall Extension.

Details of cases referred and abnormalities discovered are given below, but it should be noted that these were extracted from the figures of the main report for the City of Manchester attached herewith, and are not in addition to those figures.

<i>Examinee group</i>							<i>Number</i>
General practitioner referrals .. .. .	..	..	..	..	..	..	3,210
Contacts of tuberculosis cases .. .. .	..	..	..	..	..	..	336
School children Mantoux tests .. .. .	..	..	..	..	..	..	234
Statutory examination (persons in contact with children) .. .. .	..	..	..	..	..	..	2,665
Public and Industrial groups .. .. .	..	..	..	..	..	..	514
							<hr/>
All groups .. .. .	..	..	..	..	..	..	6,959
							<hr/>

<i>Abnormalities discovered</i>							<i>Number</i>
Tuberculosis requiring treatment or close observation							25
Tuberculosis requiring occasional observation ..	..	..	..	..	..	..	24
Neoplasms .. .. .	..	..	..	..	..	..	28
Cardiac lesions .. .. .	..	..	..	..	..	..	48
Other significant abnormalities .. .. .	..	..	..	..	..	..	196
							<hr/>
All abnormalities .. .. .	..	..	..	..	..	..	321
							<hr/>

The success of these special sessions is clear from the marked increase in numbers referred for examination which rose to 6,959 from 5,200 in 1970. Most of this increase was in doctors' patients.

Table I Persons examined	14 & under		15-		20-		25-		35-		45-		55-		60-		65 plus		All Ages		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
General practitioner referrals ..	90	50	70	120	170	150	410	280	410	210	410	230	180	100	80	120	50	100	1,870	1,360	3,230
Schoolchildren Mantoux positive	150	90																	150	90	240
Contacts	—	10	20	30	50	20	80	50	—	90	30	120	10	10	10	30	90	40	290	400	690
Factories/Offices			390	660	790	1,170	1,320	700	1,380	780	1,350	890	670	340	300	110	60	10	6,260	4,660	*10,920
Statutory examinations ..			80	360	150	200	50	180	30	120	30	70	—	20	10	10	—	—	350	960	1,310
Inmates of prisons, etc. ..			160	—	230	—	110	—	50	—	10	—	10	—	10	—			580		580
General public			220	300	410	560	570	870	720	790	660	1,030	360	540	370	540	700	1,020	4,010	5,650	9,660
Total	240	150	940	1,470	1,800	2,100	2,540	2,080	2,590	1,990	2,490	2,340	1,230	1,010	780	810	900	1,170	13,510	13,120	26,630
Table II Diagnosis Tuberculous cases	14 & under		15-		20-		25-		35-		45-		55-		60-		65 plus		All Ages		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
Tuberculosis—healed							1	—	3	—	4	3	—	3	2	—	6	2	16	8	24
Tuberculosis requiring occasional clinic supervision	—	2			1	—	—	2	3	7	11	8	4	1	10	2	14	13	43	35	78
Tuberculosis requiring treatment or close supervision			1	1	4	3	3	3	7	1	8	6	3	1	5		4	2	35 (2.59)	17 (1.29)	52 (1.95)

*Up to July, 1971 Statutory examinations were classified in Factories/Offices and this figure includes 1,350 Statutory examinations.

The figures shown in brackets show the discovery rate per thousand persons examined found with tuberculosis requiring treatment or close supervision.

	14 & under		15--		20--		25--		35--		45--		55--		60--		65 plus		All Ages		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
Types of examinees found with tuberculosis requiring treatment or close supervision																					
General practitioner referrals ..			1	1	1	3	—	2	3	1	5	1	2	1	2	—	1	2	15	11	26 (8.05)
Contacts					—	1	—	1	1	—					1	—			2	1	3 (4.34)
Factories/Offices					2	—	2	—	2	—	3	4	1		1	—			9	4	13 (1.19)
Inmates of prisons, etc. ..																			1	—	1 (1.72)
General public					1	—	1	—	1	—	—	1			1	—	3	—	8	1	9 (0.93)
Total			1	1	3	3	3	3	7	1	8	6	3	1	5	—	4	2	35	17	52

The figures shown in brackets show the discovery rate per thousand persons examined found with tuberculosis requiring treatment or close supervision.

Table IV	14 & under		15-		20-		25-		35-		45-		55-		60-		65 plus		All Ages		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
Non-tuberculous cases																					
Malignant neoplasms									1	—	7	3	11	1	8	2	8	3	35	9	44
Non-malignant neoplasms ..			—	1	—				—	2	3	3	—	1	1	2	—	1	4	11	15
Lymphadenopathies					1	—			1	—	1	—			2	—	1	—	7	—	7
Sarcoids					—	1		2					—	1					2	4	6
Congenital cardiac and vascular abnormalities																	1	—	1	—	1
Acquired cardiac and vascular abnormalities			—	2	1	1	—	1	2	3	14	7	11	5	7	9	12	17	47	45	92
Pneumoconiosis without PMF..																					9
Pneumoconiosis with PMF ..					2	—									—	1			—	1	1
Congenital abnormalities of the bony thorax and soft tissues ..																			2	—	2
Acquired abnormalities of the bony thorax and soft tissues ..	1	—			1	—	2	—	2	—	4	1	1	1	3	1	3	—	17	3	20
Bacterial and virus infections ..			2	2	6	2	6	3	11	5	20	8	5	3	15	4	11	4	76	31	107
Bronchiectasis	—	1			2	—	3	3	—	1	1	3	4	4	1	—	5	1	16	13	29
Emphysema											2	—	2	—	4	—	6	—	14	—	14
Fibrosis							2	1	5	2	8	4	10	1	10	3	13	2	48	13	61
Spontaneous pneumothorax ..			1	—	1	—			—	1	1	—	1	—					4	1	5
Pleural effusion									1	—	2	1	1	—			—	2	4	3	7
Metastases in lungs or thorax ..			1	—							—	1	—	2			1	—	2	3	5
Pleural thickening or calcification					1	—			2	1	2	1	4	4	4	—	4	1	17	7	24
Abnormalities of the diaphragm							—	1	1	—	2	2	1	—	1	2	1	4	6	9	15
Miscellaneous					—	1	—	2	—	1	1	—	2	2	3	—	3	3	9	9	18
Total	1	1	4	5	15	6	17	13	26	16	72	34	55	25	61	24	69	38	320	162	482
Failed to attend for further investigation			2	1	1	2	3	1	3	3	2	3	3	—	2	1	5	1	21	12	33

Family planning

The Health Department has for many years accepted fully the responsibility for providing a comprehensive family planning service as part of the personal health services.

Throughout the year, a great deal of planning and preparation was carried out so that this service could be made available within easy reach of every Manchester resident. By the end of the year, eighteen weekly sessions were being held in fifteen child health centres and plans have been completed for a further nine clinic sessions to be commenced in nine additional centres during the first few weeks of 1972. The expansion was helped enormously by a grant authorised under the fourth phase of the Government's Urban Programme. This amounted to £10,200 to provide 12 additional family planning clinics, a domiciliary service and two training courses per year.

A domiciliary service has for some years been available, certain medical officers being willing to home visit necessitous cases to give advice and issue supplies as required. Their services have been called upon very infrequently because means of persuasion have been used to bring patients to the clinic. Such means included the arrangement for children to be minded in day nurseries, play groups, etc., whilst the mother visited the clinic, and the arrangement for the mother to be transported to and from the clinic. In the past these methods proved to be economical in time and clinic staff but further expansion of domiciliary services was envisaged for the future.

Expansion of a service cannot take place without additional trained staff being available and with this in mind a training course in family planning was organised following approval by the Health Committee earlier in the year. This was believed to be the first training course of this type undertaken by a local authority in the country. The content of the course included the following subjects :—

- Population expansion and the need for family planning.

- Motivation for family planning, including genetics.

- Anatomy and physiology of the relevant systems.

- Diseases of the relevant systems and their detection, including cytology.

- General introduction to the methods of birth control.

- Hormonal methods of fertility control

- Intra-uterine devices.

- Tubal ligation, male and female.

- Other methods of control, e.g., periodic abstinence.

- Sub-fertility.

- Termination of pregnancy.

- Psycho-sexual problems.

- Organisation and administration of Local Authority family planning clinics.

The course commenced with three days of theory in September and was followed by at least seven practical sessions attended by each of the trainees on the course. These practical sessions were held within the Health Department's own family planning clinics. All the trainees completed the course by the end of December and further courses of training are planned to take place twice a year in the future.

Eight medical officers and nineteen nurses, a total of twenty-seven trainees, attended the first course, eleven of whom were sponsored by five neighbouring local health authorities.

At all family planning clinics, advice, education and supplies were provided for the normally accepted contraceptive procedures—oral, mechanical, physiological and surgical. The choice of method was left to the discretion of the doctor after consultation with the recipients and after full counselling of both partners when possible.

The vast majority of patients were referred to the clinics for contraceptive advice and treatment but in certain instances advice was sought because of sub-fertility or marital problems.

As a routine a cervical smear was taken from all new patients attending the family planning clinics who had not previously had a test. These tests were also carried out on patients who could not conveniently attend a cervical cytology clinic.

Results of all smear tests taken at family planning clinics are included in the statistics given in the section of this report dealing with cervical cytology (see page 208).

Analysis of New Cases

Table 1.

	Number of new patients seen during the year		
	Married (included the widowed separated or divorced)	Unmarried	Total
Male	1	—	1
Female	3,193	460	3,653
Total	3,194	460	3,654

Table 2.

Number of new patients seen during the year who were:—	Medical cases	256
	Non-medical but needy	715
	Other non-medical cases	2,683
	Total	3,654

Table 3.

Number of new patients seen during the year who were initially advised to use	Sheath	251
	Pill	1,979
	Diaphragm	208
	I.U.D.	1,074
	Other methods	199
	No method advised	225

Details of patients and attendances by age groups 1967–1971

Table 4

Year	Under 20 years		20/29 years		30/39 years		40 + years		Total No. of patients	Total No. of attendances
	No. of patients	No. of attendances	No. of patients	No. of attendances	No. of patients	No. of attendances	No. of patients	No. of attendances		
1967.. ..	37	72	454	1,112	229	536	37	97	757	1,817
1968.. ..	153	362	1 706	4 156	754	1,431	92	187	2,705	6,136
1969.. ..	341	936	2,399	6,552	880	2,117	122	326	3,742	9,931
1970.. ..	488	1,298	3,256	9,415	1,076	2,862	154	436	4,974	14,011
1971.. ..	643	1,812	4,371	11,831	1,442	3,690	245	616	6,701	17,949

Family guidance service

The former family welfare service was renamed the family guidance service early in the year to distinguish its work from welfare work undertaken by the Social Services Department which came into being at that time. Family guidance remained essentially the same as previously, i.e. a service available for the family as a whole or in part, where problems large or small could be deliberated and resolved whenever possible.

The staff consists of:—

- 1 consultant psychiatrist,
- 2 senior medical officers of the Health Department,
- 1 psychiatric social worker,
- 2 clerks,

the whole welded together into an efficient and highly effective team.

Clinics were held in five different maternal and child health centres. Brunswick Health Centre, became operative following the opening of the centre in April, after which 45 cases were dealt with by the senior medical officer. Some of these referrals were made by the general practitioners at the centre with whom helpful contact was made from the start.

Regular case conferences were held at Darbishire House. Dr. Grant the consultant psychiatrist reported as follows on the year's work:—

“During the year, two changes showed their useful effects. A change of name from “welfare” to “guidance” may seem small but it gave a much more accurate description of the consultative service, within the Health Department, which was offered in family problems.

Also evident was an increasingly close liaison between “child guidance” and “family guidance”. The former relates primarily to children of school age, but school children in disturbed families were very much part of the family situation which the family guidance service was called upon to deal with, and the closer contact developed between the two services was of considerable value. A disturbed child, failing at school, was all too often one of the evidences of a seriously disturbed parental relationship in which the children shared.

Many parents were aware of this, and an increasing proportion of those who sought help from the family guidance service did so because they had become aware of some disturbance in their children for which,

rightly or wrongly, they felt responsible. Almost one in four of the referrals seen came into this category. Parents under stress can indeed affect their children adversely and without deliberate malice. The more severe examples of this were sometimes associated with physical assault in the condition that has come to be known as the "battered child" syndrome, but much lesser degrees of harmful involvement of distressed parents in the personality development of their children can be disruptive. Such parents need and ask for help. The service was able to give not only necessary psychiatric assessment but more long-continued support and guidance".

Liaison between the child guidance service of the Education Department and the family guidance service continued to be very good. In several cases the family guidance service was able to support the parents of children who attended the child guidance clinics. Similarly, the services of the child guidance clinics were most helpful, particularly where a child was refusing to attend school.

A typical example of the many problems dealt with at the family guidance clinic was as follows:—

A boy, J., aged 4 years, had been referred by his doctor to a consultant paediatrician because he was continually pulling out his hair. No abnormal physical cause could be found so the paediatrician referred the boy to the school health service and from there he was referred to the family guidance clinic. J. was the youngest of a family of three boys. His mother was a West Indian and unmarried. She had left the two older boys with her parents before she came to England. The father of J. deserted her as soon as she became pregnant so she brought J. up by herself and worked very hard to support him. Shortly before attending the clinic she had been rehoused in an area where she had no friends and was away from the security of the West Indian community where she had been happy. Increased expense had led to her working overtime on a very heavy job. Consequently, she was tired and had very little time or patience to play with J. when she returned home.

Unfortunately, the mother had left J. in bed asleep one morning, thinking that she could do a hurried errand. He had wakened and been terrified to find that he was alone.

The mother's problems were discussed at length and she was able to express some of her feelings of fear and anxiety. After several visits, J. was much better. His mother had ceased to do the heavy work and was understanding some of his needs for companionship, security and time to learn how to do simple tasks such as dressing himself. J. stopped pulling out his hair and the mother gave her assurance that she would return to the clinic if any further difficulty arose.

Case load

	Darbishire House	Northenden	Didsbury	Charlestown/ Collyhurst	Brunswick	Totals
Old cases ..	20	24	12	12	9	77
New cases ..	37	71	21	30	51	210
Total cases seen	57	95	33	42	60	287
Total number of interviews during the year.. ..	239	261	185	113	159	957

Source of referral of cases:				Diagnosis of problem in all cases:			
Health visitors	..	..	80	Marital disharmony—without			
General practitioners	..	..	61	apparent individual disorder	..	121	
Citizens Advice Bureau	..	..	28	Individual disorder—			
Social Services Department	..	..	14	predominantly psychiatric	..	81	
Relatives	..	..	13	personality maladjustment	27		
Education Department	..	..	12	anxiety state	..	24	
Family guidance staff	..	..	10	depression	..	20	
Own initiative	..	..	10	sexual problems	..	7	
School health service	..	..	9	schizophrenia	..	3	
Maternal and child health clinics			8	Family concern—advice sought		69	
Other clients	..	..	7	re children	..	62	
Child guidance service	..	..	6	re other relations	..	7	
Brunswick health centre	..	..	5	Extra-family problems—			
Medical social workers	..	..	5	work, school, housing	..	16	
Hostel wardens	..	..	3				
Samaritans	..	..	3				
Family planning clinics	..	..	2				
Family welfare association	..	..	2				
Press..	..	..	2				
Student health service	..	..	2				
Clergy	..	..	1				
Cytology clinics	..	..	1				
Family service unit	..	..	1				
Friend	..	..	1				
Marriage Guidance Council	..	..	1				
<hr/> 287 <hr/>				<hr/> 287 <hr/>			

Co-ordinating committee for the care of children neglected or ill-treated in their own homes

During the year, the senior medical officer attended these meetings and on many occasions was able to obtain appropriate medical treatment for the people involved by co-ordination with the general practitioners and the hospital services. This was possible especially in families where one member's mental illness might be causing suffering and distress to other members of the family. The impression gained was that many more cases of mental illness could be successfully treated if the patient could be persuaded to attend at the right place for professional help. The stress and strain caused by mental illness to the other partner in a marriage or to the children is enormous. Mothers seemed to be particularly vulnerable to this state of affairs. They became so tired that they lost heart and ceased to make the extra effort required to get the sufferer to hospital at the right time.

Liaison between the family health service and the child guidance service

The senior medical officer continued to liaise with the child guidance service of the school health service.

Regular meetings with the principal educational psychologist were attended to discuss cases where medical problems were involved. Discussions as to future treatment of a particular child took place with the child's parents and general practitioner and on many occasions a medical examination was made at a child guidance clinic with reference to hospital consultants for investigation when required.

Reports of educational psychologists

Every report was scrutinised by the senior medical officer. The relevant information for the school medical officer was recorded on school health records and it was ensured that medical follow-up was carried out as appropriate. During the year, 405 such reports were dealt with.

Educational welfare officers

Many of these officers passed their requests for the help of the child guidance service via the senior medical officer, who excluded underlying medical or emotional problems.

The Alice Briggs Hostel

This Education Department hostel was opened in April 1971, for the admission of boys who were maladjusted to their own homes. They continued to attend Manchester schools but lived away from home; the object was to try to rehabilitate them so that they were able to fit into their own home environment.

Regular meetings to discuss the progress of boys in residence and to consider future admissions to the hostel were attended by the senior medical officer who expressed appreciation for the friendly way in which she was welcomed to the child guidance clinics resulting in the establishment of valuable liaison.

Community Relations

1971 was designated "International Year for Racial Harmony" by the United Nations, and saw several developments in the field of community relations in Manchester.

First, the post of Social Welfare Officer for Immigrants was discontinued and the post of Community Relations Officer was instituted. This change reflected in some measure the realities of a situation already in existence, but it also reflected the recognition of the responsibility of the Authority for promotion of good community relations. Furthermore, it was fairly clear that under the new structure set up by the Local Authority Social Services Act 1970, the social welfare of any citizen, irrespective of origin, must lie with the Social Services Department.

Another important development was the introduction of the Immigration Act, 1971. The effects on community relations of the passage of the Bill through Parliament were watched very carefully and with some concern. We shall continue to watch the effects of the working of the Act.

Throughout the year close co-operation was maintained with the Manchester Council for Community Relations, the Community Relations Officer acting as Secretary to their Social Services Sub-Committee. The results of earlier research into council housing by the Community Relations Officer and the Manchester Council for Community Relations were published in 1971 as "Coloured Families in Council Houses—Problems and Prospects for Manchester". Further research was undertaken during the year on the

effects of the slum clearance programme on race relations. It is hoped that these results will be published in 1972.

Several conferences on specific aspects of race relations took place in the city during the year, and an exhibition with "Harmony" as its theme, has been displayed in various local centres.

Co-operation has also been maintained with the Race Relations Board and the United Kingdom Immigrants Advisory Service, whose Counsellor is now dealing with many questions on immigration formerly dealt with by the Social Welfare Officer for Immigrants.

The Community Relations Officer has continued to represent me on the L.M.S. Project, and has undertaken a range of speaking engagements on race relations topics, both within and outside the Town Hall.

The new Social Services Department, and in particular the Community Development Section, is seen as a valuable addition to the resources available to improve community relations, and it is hoped that the Housing Aid Centre to be opened early in 1972 will also make a positive contribution. We look forward to 1972 in the hope that, with continued co-operation with immigrant organisations, with other bodies concerned with race-relations, and especially with Manchester Council for Community Relations, we may continue to try to overcome the divisive forces within our society.

Incidence of Blindness

(National Assistance Acts)

The following information has been kindly supplied by the Director of Social Services and the majority is in the form required by the Department of Health and Social Security.

Follow-up of registered blind persons

	Cause of disability		
	Cataract	Glaucoma	Others
(i) Number of cases registered as blind during the year 1971 in respect of which section F of form B.D.8 recommends:—			
(a) no treatment	2	1	23
(b) treatment (medical, surgical or optical) ..	9	15	46
(ii) Number of cases at (i) (b) above which on follow-up action have received treatment	8	13	41
(iii) Number of cases at (ii) above in which:—			
(a) vision improved ..	—	—	1
(b) sight restored	—	—	—
(c) treatment continuing at end of year	7	13	40

Follow-up of registered partially-sighted persons

	Cause of disability		
	Cataract	Glaucoma	Others
(i) Number of cases registered as partially-sighted during the year 1971 in respect of which section F of form B.D.8 recommends :—			
(a) no treatment	—	—	6
(b) treatment (medical, surgical or optical) ..	26	5	49
(ii) Number of cases at (i) (b) above which on follow-up action have received treatment	26	5	49
(iii) Number of cases at (ii) above in which :—			
(a) vision improved ..	—	—	—
(b) sight restored	—	—	—
(c) treatment continuing at end of year	25	5	46

Summary of register of blind persons for 1971

					Twelve months ended 31-12-1971	Twelve months ended 31-12-1970
Number of cases on register .. .. .	..	..	..	..	1,174	1,134
<i>add</i>						
Number of new cases .. .. .	..	..	..	..	96	119
Removals into area .. .. .	..	..	..	..	22	22
					1,292	1,275
<i>deduct</i>						
Number of deaths .. .. .	..	..	..	..	68	86
Removals out of area .. .. .	..	..	..	..	29	15
					1,195	1,174
	1971				1970	
	<i>Males</i>	<i>Females</i>			<i>Males</i>	<i>Females</i>
	482	713			478	696

Analysis of register of blind persons

	at 31-12-1971	at 31-12-1970
	Number of cases	
<i>Children:—</i>		
Under 5 years of age	5	3
5 to 15 years of age—at school	11	11
—not at school	8	8
<i>Adults over 16 years of age:—</i>		
At school	4	3
Under training	8	5
Not training but trainable	2	3
Trained but unemployed	2	2
Employed at blind institutions or elsewhere	131	131
Unemployed	1,024	1008
	<hr/> 1,195	<hr/> 1,174

Age periods				
0- 4 years of age	..	..	..	5
5-10	"	"	..	12
11-15	"	"	..	7
16-20	"	"	..	16
21-29	"	"	..	39
30-39	"	"	..	46
40-49	"	"	..	71
50-59	"	"	..	130
60-64	"	"	..	85
65-69	"	"	..	100
70-74	"	"	..	150
75-79	"	"	..	162
80-84	"	"	..	168
85-89	"	"	..	119
90 plus	"	"	..	85
				<hr/> 1,195 <hr/>

There was an increase of twenty-one on the register of blind persons compared with 1970; the largest increase was in persons over 80 years of age. Eighty-eight per cent of registered blind persons over 16 years of age were unemployed. 66·95 per cent of these persons were over 65 years of age.

Summary of register of partially-sighted persons for 1971

					Twelve months ended 31-12-1971	Twelve months ended 31-12-1970
Number of cases on register	..	..	..	..	667	646
<i>add</i>						
Number of new cases	..	..	..	..	86	83
Removals into area	..	..	..	..	5	4
					<hr/> 758	<hr/> 733
<i>deduct</i>						
Number of deaths	..	..	..	.. 16		32
Removals out of area	..	..	..	.. 2		10
Cases de-certified	..	..	..	.. —		2
Transfers to blind register	..	..	..	.. 23	41	22
					<hr/> 717	<hr/> 667
New cases	1971		1970			
	Males	Females	Males	Females		
	37	49	25	58		

Analysis of register of partially-sighted persons

					at 31-12-1971	at 31-12-1970
					Number of cases	
<i>Children:—</i>						
Under 5 years of age	..	..	..	..	2	2
5 to 16 years of age—not at school	..	..	..	..	2	1
5 to 16 years of age—at school	..	..	..	..	32	33
Over 16 years of age—at school	..	..	..	..	5	10
<i>Adults over 16 years of age:—</i>						
Under training	..	..	..	..	4	4
Available for training	..	..	..	..	13	8
Employed elsewhere	..	..	..	..	80	79
Unemployed	..	..	..	..	579	530
					<hr/> 717	<hr/> 667

Age periods					
0- 4 years of age	..	..	..	..	2
5-10	"	"	..	..	13
11-15	"	"	..	..	21
16-20	"	"	..	..	29
21-29	"	"	..	..	39
30-39	"	"	..	..	20
40-49	"	"	..	..	35
50-59	"	"	..	..	42
60-64	"	"	..	..	54
65-69	"	"	..	..	44
70-74	"	"	..	..	78
75-79	"	"	..	..	106
80-84	"	"	..	..	112
85-89	"	"	..	..	80
90 plus	"	"	..	..	42
					717

The number of registered partially-sighted persons increased by fifty compared with 1970; the largest increase was in persons aged 75-78. Eighty-eight per cent of partially blind persons over 16 years of age were unemployed. 67.84 per cent of these unemployed persons were over 65 years of age.

Classification of cases of blindness certified and registered in 1971

						Males	Females	Total
New cases from 1st January to 31st December,								
1971	..	..	..	..	..	36	60	96
Number of deaths during 12 months						28	40	68

Ages at which blindness occurred	New cases			Present age periods		
	Males	Females	Total	Males	Females	Total
0	1	2	3	—	—	—
1-2	—	—	—	—	—	—
3	—	—	—	1	1	2
4	—	—	—	—	—	—
5-10	1	—	1	—	1	1
11-15	1	—	1	—	—	—
16-20	1	—	1	2	—	2
21-29	—	—	—	—	—	—
30-39	1	—	1	1	—	1
40-49	1	4	5	1	1	2
50-59	4	5	9	4	6	10
60-64	4	5	9	3	3	6
65-69	3	4	7	4	5	9
70-74	7	12	19	6	12	18
75-79	4	8	12	6	7	13
80-84	3	15	18	3	14	17
85-89	4	4	8	4	7	11
90 and over	1	1	2	1	3	4
Totals	36	60	96	36	60	96

<i>Other disabilities</i>					Males	Females
Hard of hearing	..	..	..		—	3
Deaf without speech	..	..	..		1	—
Mentally subnormal	..	..	..		—	1

Causes of blindness

	Males	Females	Total
Cataract	3	8	11
Glaucoma	6	10	16
Diabetic retinitis	1	3	4
Macular degeneration	9	18	27
Myopia	4	2	6
Keratitis	—	2	2
Retinopathy	—	1	1
Disciform degeneration	1	—	1
Optic atrophy	1	2	3
Uveitis	—	2	2
Central Amaurosis	1	—	1
Detachment of retina	—	2	2
Other causes	10	10	20
	36	60	96

Summary of statistics of blind persons for the last ten years

Year ended 31st December	Total on register	New cases	Cases re-certified	Deaths	Cases de-certified	Transfers into area	Transfers out of area
1962	1,219	144	—	199	2	26	32
1963	1,204	154	—	141	2	21	50
1964	1,192	132	1	136	1	28	36
1965	1,189	144	1	137	—	17	28
1966	1,165	132	1	139	2	30	46
1967	1,162	125	1	101	2	21	47
1968	1,140	108	—	119	1	20	30
1969	1,134	92	—	99	—	21	20
1970	1,174	119	—	86	—	22	15
1971	1,195	96	—	68	—	22	29

Scabies and verminous conditions

Monsall Cleansing Unit built in the 1930's acted a half-way house to people transferring from their slum dwellings to new corporation estates. Furniture and clothing were fumigated and bathing facilities were offered to the families themselves.

During and after World War II the character of the work changed and the service of cleansing was offered to verminous persons. The City's hospitals and the school health service availed themselves of this, as did adjacent local authorities—the latter paying a nominal charge towards the cost.

This work pattern continued until 4th January, 1971 when the unit had to be closed because of inadequate heating. There was also a lack of modern working facilities for the staff.

While careful consideration was being given to the renovation of the building emergency arrangements were made to carry on the work of the unit using school clinic premises for treating infested children and their parents, if necessary, as well as verminous elderly people living in their own homes.

The majority of the unit's clients, however, were men and women resident in the local authority or voluntary hostels in the City and it was decided to offer the services of the staff to cleanse infested residents on hostel premises. This was eagerly accepted and has proved its worth.

A statement of work done by the Monsall staff both in school clinics and local authority and other hostels is given below, excluding that done for school-children, which is recorded in the report of the Principal School Medical Officer, since they are now included with all other children treated in school clinics.

Cases treated in Hostels for Men and Women

1.1.71 to 31.12.71	Scabies						Verminous conditions					No. of aged persons bathed	Total number of all treatments given
	First treatment only					No. of second treatments given							
	Adult males	Adult females	School children	Children under 5	Total new patients		Adult males	Adult females	School children	Children under 5	Total		
	—	—	—	—	—	—	390	19	—	—	409	—	409

Including 4 verminous adult females bathed in their own homes.

Sources from which persons were referred

	Voluntary	Hospitals	G.P.'s	H.V.'s	Day nurseries and clinics	Public health insps.	Social services department	Hostels	Other local authorities	Total
Scabies	—	—	—	—	—	—	—	—	—	—
Verminous conditions	47	—	—	53	—	—	—	309	—	409
Aged persons	—	—	—	—	—	—	—	—	—	—
.. .. .	47	—	—	53	—	—	—	309	—	409

Cases treated in School Clinics

1.1.71 to 31.12.71	Scabies						Verminous conditions					No. of aged persons bathed	Total number of all treatments given
	First treatment only					No. of second treatments given							
	Adult males	Adult females	School children	Children under 5	Total new patients		Adult males	Adult females	School children	Children under 5	Total		
	13	53	—	61	127	99	—	24	—	97	121	5	126

Including 7 verminous children cleansed in their own homes.

Sources from which persons were referred

	Voluntary	Hospitals	G.P.'s	H.V.'s	Day nurseries and clinics	Public health insps.	Social services department	Hostels	Other local authorities	Total
Scabies	33	—	65	29	—	—	—	—	—	127
Verminous conditions	5	—	19	97	—	—	—	—	—	121
Aged persons	—	—	—	5	—	—	—	—	—	5
Total	38	—	84	131	—	—	—	—	—	253

SCHOOL HEALTH SERVICE

Introduction

Manchester School Health Service in common with other parts of the country continued to find difficulty in obtaining medical practitioners to undertake full time work, and an increasing number of general practitioners carried out medical inspections at schools on a sessional basis.

For several years it had not been possible to complete the establishment of speech therapists and physiotherapists. It was therefore, gratifying to report that this was achieved during 1971.

As the replanning of Manchester continued, the closing of long established school clinics was inevitable. In May, Shakespeare Street Clinic closed and was replaced by the school clinic which is incorporated in Brunswick Health Centre. In April, the provisions of the Education (Handicapped Pupils) Act were implemented, when the education of children in attendance at the four junior training centres became the responsibility of the Education Committee. This transfer did not increase the works of the School Health Service as the medical inspection of these children had been carried out by school medical officers for some years.

In response to a letter sent by the Chief Education Officer to the parents of children aged 7-12 years concerning the Education (Milk) Act 1971 requests were received for the medical examination of 5,060 children. These examinations were carried out by school medical officers during the Autumn term. A total of 2,037 children was considered to require milk at school on medical grounds.

General Statistics

School population January 1972—maintained Schools	..	103,197
Number of maintained Nursery, Primary and Secondary Schools		304
Number of children on registers	.. .. .	100,326
Number of maintained Special Schools	.. .. .	31
Number of children on registers	.. .. .	2,871
Number of children attending direct grant, non-maintained and Independent Schools	.. .. .	3,366

School Clinics

Minor ailment clinics were open from Monday to Friday each week except for public holidays.

Medical Officers attended the clinics at regular weekly sessions. Children were examined for all defects and treated accordingly or referred to the necessary consultant. This included eye defects, E.N.T. defects, skin and speech defects. Intelligence tests were carried out at the request of teachers or parents and in many cases children were referred for special schooling or remedial help.

Immunizations against poliomyelitis, diphtheria and tetanus were carried out. Sessions for the latter were greatly increased on account of the outbreak of diphtheria in the City in February. Certain children going on school holidays abroad were vaccinated against smallpox.

Children employed outside of school hours were examined in accordance with local bye-laws.

Specialised clinics for orthopaedics; vision; dental; ear, nose and throat examinations; haemoglobin estimations, enuresis and sunray treatment were provided.

Physiotherapy and remedial exercises were provided for pre-school and school children. Many of these were referred by consultants from the Chest Clinic or medical officers attached to the School Health Service or Child Welfare Service.

Attendances at the clinics were as follows :—

(a) Dental Clinics	..	..	..	..	..	..	57,362
(b) Other Clinics	..	..	..	..	..	..	217,515

Ultra Violet Ray Therapy—

Number of children treated	..	..	..	291
Discharged. Treatment completed	..	..	..	159
Ceased to attend before treatment completed			..	71
Number of children receiving treatment at 31.12.71				61
Total number of treatments given	..	..	..	3,931

Shakespeare Street School Clinic (1921–1971)

After half a century of service to children in the Chorlton-on-Medlock area this school clinic was closed and it was not without some tinge of sadness that the staff housed there removed to the new Brunswick Health Centre on 14th May.

The school health programme of work for Shakespeare Street will be carried on from Brunswick Street with the added interest for staff that they are now in much closer contact with the general practitioners in the area. It is expected that as all members of the new health centre staff increase their understanding of each other's work there will eventually be one active community health team serving the Chorlton-on-Medlock area of the City.

School clinics

Medical and dental clinics

*Ancoats	Cannel Street, Ancoats, Manchester, M4 6HE Tel: 205 2920
*Baguley	Hall Lane, Baguley, Manchester, M23 8NA Tel: 998 4408
*Brunswick Health Centre Opened 17th May, 1971 Central	Hartfield Close, Brunswick Street, Manchester M13 9TP Tel: 273 4901 Byrom Street, Deansgate, Manchester, M3 4PF Tel: 236 3377 Ext. 7443
*Charlestown	Charlestown Road, Blackley, Manchester, M9 2DD Tel: 740 7955
Cheetham	Smedley Street, Cheetham Hill Road, Man- chester, M9 9UN Tel: 205 1622
Gorton	Gorton Road, West Gorton, Manchester, M12 5BQ Tel: 223 1489
Levenshulme	963 Stockport Road, Levenshulme, Man- chester, M19 3NP Tel: 224 1663
Moston	16 Moston Lane, Harpurhey, Manchester, M9 1AA Tel: 205 1007
Newton Heath	Pilling Street, Oldham Road, Newton Heath, Manchester, M10 6AW Tel: 205 2646
Northenden	Bazley Road, Northenden, Manchester, M22 4FL Tel: 998 2652
*Northern Moor	Moorcroft Road, Northern Moor, Manchester, M23 0AF Tel: 998 5522
Openshaw	1460 Ashton Old Road, Higher Openshaw, Manchester, M11 1HL Tel: 370 1429
*Plant Hill	Plant Hill Road, Blackley, Manchester, M9 31Z Tel: 740 7909
Shakespeare Street Closed 14th May, 1971	67/73 Shakespeare Street, Chorlton-on- Medlock, Manchester, M13 9LE Tel: 273 1010 Dental Department: Tel: 273 6094
Stretford Road	Stretford Road, Near Royce Road, Hulme, Manchester, M15 5AB Tel: 226 1529
Withington	535 Wilmslow Road, Withington, Manchester, M20 8RN Tel: 445 1555 and 8899
*Woodhouse Park	Simonsway, Woodhouse Park, Manchester, M22 5JZ Tel: 437 4625

Dental clinics

*Abbey Hey	Constable Street, Manchester, M18 8GD Tel: 223 7420
*Didsbury	Wilmslow Road, Didsbury, Manchester, M20 8RN Tel: 445 6743

* Accommodation in these premises is shared with the Family Health Services.

Special clinics

Orthopaedic clinics

Lancasterian Special School, Barlow Moor Road, Manchester, M20 8XA
Tel: 445 0123/4
Telford School, Bank House Road, Blackley, Manchester, M9 3LT
Tel: 740 1897/8

Child guidance clinics

54 Hathersage Road, Chorlton-on-Medlock, Manchester, M13 0EF
Tel: 224 3686 and 4510
Crossley Street, Gorton, Manchester M18 8BA
Tel: 223 3158
Westmorland Street, Harpurhey, Manchester, M9 1GN
Tel: 205 2857
Wilmslow Road, Withington, Manchester, M20 8RN
Tel: 445 1555 and 8899
Yew Tree Lane, Wythenshawe, Manchester, M23 0EA
Tel: 998 4130 and 4897

Speech therapy clinics

56 Hathersage Road, Chorlton-on-Medlock, Manchester, M13 0EF
Tel: 224 5117
Baguley, Charlestown, Cheetham, Gorton, Newton Heath, Northern Moor, Stretford Road, Withington and Woodhouse Park Clinics, Bostock Hall, Bradford Grange, Crumpsall Open Air, Every Street, Ewing, Great Moreton Hall, Lancasterian, Margaret Barclay, Mill House, Park, Riverside, Sandilands, Shawbrook, Soss Moss, Telford, Whitebrook, White Moss, Whitworth and Woodside Schools.

Audiometer clinic
Ophthalmic clinic
Orthoptic clinic
Oto-Laryngological

} Central Clinic, Byrom Street, Deansgate, Manchester, M3 4PF
Tel: 236 3377 Ext. 7443

Enuresis clinics

Cheetham, Gorton, Newton Heath, Northenden, Shakespeare Street and Woodhouse Park Clinic

Orthodontic clinic
Closed May 1971

73 Shakespeare Street, Chorlton-on-Medlock, Manchester M13 9LE
Tel: 273 6094

Opened May 1971

Hartfield Close, Brunswick Street, Manchester, M13 9TP
Tel: 273 4901

Mobile dental clinics

No. 1 Royce Primary School

Clopton Street, Manchester, M15 5FT
Tel: 226 2281

No. 2 Seymour Road Primary School

Manchester, M11 4PR
Tel: 370 6985

Table showing the average number of half day sessions held at school clinics in each week during the year

School Clinic		Examination of physically handicapped pupils.	Examination of educationally sub-normal pupils.	Examination of epileptic pupils.	Examination of delicate pupils.	Examination of children requiring convalescent treatment.	Examination of schoolchildren for employment.	Examination of staff and teachers.	Examination for defective vision.	Treatment of miscellaneous minor ailments.	Treatment of ear, nose and throat diseases.	Treatment of minor orthopaedic defects.	Ultra-violet ray treatment.	Chiropody.	Immunization and vaccination.	Dental treatment.
Abbey Hey
Ancoats
Baguley
Brunswick Health Centre
Central
Charlestown
Cheetham
Didsbury
Gorton
Levenshulme
Moston
Newton Heath
Northern
Northern Moor
Openshaw
Plant Hill
Stretford Road
Withington
Woodhouse Park
Totals

CONSULTANT SERVICES AND SPECIAL CLINICS

Audiometer ..	..	4 sessions	Haemoglobin estimation ..	1 session	Orthoptic ..	6 sessions
Child Guidance	..	13 sessions	Ophthalmic ..	1 session	Oto-laryngological	3 sessions
Enuresis ..	..	5 sessions	Orthodontic ..	7 sessions	Speech Therapy ..	128 sessions
	..		Orthopaedic ..	20 sessions	Mobile dental unit	11 sessions

Medical Inspections

Medical inspections of school children during 1971 covered the same age groups as in previous years according to statutory requirements. Selective examinations at the intermediate age group were based on the scrutiny of questionnaires issued to parents of children who are in their first year of attendance at a secondary school. In addition special examinations at the request of parents, headteachers, education welfare officers and other agencies were carried out on children previously examined who were found to have minor defects not requiring treatment and children suffering from chronic disabilities in attendance at the ordinary schools were re-inspected. Inevitably the number of children examined varies from year to year depending on the total number eligible for examination, and the percentage of those in the intermediate age group who are referred for medical examinations. In 1971 an added factor was the diphtheria outbreak which resulted in the suspension of routine medical examinations at school from mid-February until the end of March.

Reports on the hygienic condition of the school premises were prepared and the appropriate action taken by the Buildings Section of the Education Department.

Notification of the arrival of new immigrants was received from the Medical Officer of Health in respect of 120 children and arrangements were made for a routine examination by the school medical officer.

The School Nursing Service

Nursing staff, always vigilant in carrying out the statutory duties required of them, find themselves from time to time caught up in an emergency such as happened during the spring term of this year. A few children were found to have a virulent diphtheria infection and this meant that the school nurses were completely involved in following up contacts, taking nose and throat swabs and assisting at the immunization sessions held in the schools throughout the whole City. Thus very little time was available for routine work. Evidence of this is shown in the considerable drop in the number of examinations of children for uncleanliness.

There were also some minor outbreaks of infection which while they occupied staff time were confined to their own locality.

Cleanliness of school children

The state of uncleanliness in school children did not appear to improve and staff got very frustrated when their efforts to maintain a high standard of cleanliness in the schools seemed to be without avail.

The various medicaments used in this treatment of lice infestation have their day and history has shown that the louse has produced an immunity to each one in turn. It was decided to try one more of these preparations which is said to offer a longer period before re-infestation can occur. The staff are now looking forward to a more permanent result for their labours, especially since this new treatment is thought to give more freedom from infestation in those children who seem to be more prone to infestation.

The figures below show the amount of work done in the schools and clinics, so far as uncleanliness is concerned, by the school nursing staff.

Table I

	Primary, Secondary and Special Schools		Nursery Schools and Classes	
	1970	1971	1970	1971
Number of examinations for uncleanliness	286,213	250,611	90,444	86,951
Number of individual children found unclean	16,755	15,725	2,125	2,008
Number of medical defects found at general hygiene inspections	1,132	582	179	197
Number of children remaining unclean on 31.12.71	4,116	4,606	130	155

Table II

	1970	1971
Number of inspections for uncleanliness	376,657	336,767
Number of individual children found unclean ..	18,000	17,733
Number of cleansing notices issued	963	884
Number of cleansing orders issued	553	448
Number of children compulsorily cleansed	375	316
Number of children voluntarily cleansed	4,707	3,705
Number of children examined in school for other than uncleanliness	18,525	15,096
Number of home visits for uncleanliness	7,687	8,334
Number of home visits for other reasons	8,453	14,048
Number of medical defects found at general hygiene inspections	1,310	779

Prosecutions

There were no prosecutions for uncleanliness in school children during the year.

Audiometric screening tests in schools

Screening tests of hearing were carried out on five year old school entrants and on some older children by request made by parents and head teachers.

Number of five year old children tested	10,835
Number of children with normal hearing	10,068
Number of children with hearing loss	764

Re-inspections of children who had a hearing loss at a previous inspection :

Number of children re-tested	823
Number of children with normal hearing	597
Number of children with hearing loss	226

Children with a hearing loss were referred to the school medical officer at the local clinic who after clinical examination arranged treatment or referral to the department's consultant otologist, depending on the findings.

Selected children from older age groups, referred by parents or teachers were also screened.

Number of children tested	..	..	..	..	1,074
Number with normal hearing	..	..	..	..	944
Number with hearing loss	..	..	..	..	120

School dental service

Staff

Staff in posts at the start of the year was the equivalent of 18 full-time officers and 3 full-time auxiliaries. The year ended with 36 full-time and part-time dentists giving the equivalent of 19·5 dental officers and 4 dental auxiliaries. The equivalent time of 1 full-time officer was given to the needs of Maternity and Child Health Services. The actual average working strength available for the year however was 17 dentists and 3 auxiliaries.

Development

Brunswick Health Centre was opened at the start of the year providing a modern dental unit with two dental surgeries, and including a new central dental laboratory for up to six dental technicians. The laboratory is equipped to enable it to undertake all aspects of modern dental technology. Following initial teething problems always associated with new projects this Health Centre has settled down to provide a much needed service in this re-development area.

By the end of the year Hulme Combined Clinic with 3 dental surgeries was completed ready to start work in January 1972.

In five surgeries dental equipment was modernised. One surgery had complete replacement of all old equipment, whilst in the remaining four surgeries the provision of reclining dental chairs and aspirator only was sufficient to bring them up to the modern four-handed dentistry standards of the new health centres.

Inspection and treatment

The dental officers and the auxiliaries devoted 7,925 sessions including 124 evening sessions to inspection, treatment and dental health education. Forty-eight thousand, two hundred and twenty-one pupils were inspected in schools and clinics, and of these 32,968 required treatment. Treatment was given to 16,699 children, a total of 18,104 courses of treatment were started, 14,918 being completed. Total attendances at the clinics for inspection and treatment were 57,362. Treatment consisted of 32,360 fillings, 32 inlays and 75 crowns in permanent teeth and 7,338 fillings in deciduous teeth. There were 6,599 permanent and 18,610 deciduous teeth extracted, 7,908 general anaesthetics were administered. Sickledex tests were routinely given to children of West African and West Indian origin. All positive cases, about 10%, were referred to hospital haematology departments for further investigation.

188 pupils were provided with 6 full dentures—including 2 for 5 year olds—and 201 partial dentures.

Orthodontic treatment was started for 405 children, 230 children completed their treatment whilst 85 discontinued treatment. Five hundred and twenty-five removable and 54 fixed appliances were used. There were 1,332 pupils X-rayed.

Dental Health Education occupied 113 sessions. Primary school children were given talks, demonstrations and films in school and in addition 4,662 pupils were given prophylaxis and chairside demonstrations in the surgery.

The provision of comprehensive dental treatment under general anaesthesia for severely handicapped children continued, during the year 88 children treated in this manner had 210 fillings and 117 teeth extracted. The service co-operated with the Manchester Dental hospital in running a 2-day clinical postgraduate course for local authority dental officers on the dental treatment of handicapped children. Each officer treated at least one case under intubation anaesthesia either in the dental school or the school clinic. All were appreciative and felt confident to start a similar service in their own authority.

Dental laboratory

The following table gives the work completed during the year by the dental laboratory for the School Health and Maternity and Child Welfare dental services.

Removable orthodontic appliances	..	525
Fixed orthodontic appliances	.. ..	19
Dentures	.. .. ..	304
Crowns	.. .. ..	81
Inlays—cast caps and splints	.. ..	99
Chrome cobalt plates	.. ..	33
Orthodontic record models	.. ..	610

Maternity and child health services

The equivalent of a full-time officer was given to expectant and nursing mothers and to pre-school children, a return of this work is given below.

Expectant and Nursing Mothers

Treated	Treatment completed	Attendances	Fillings	Extractions	General Anaesthetics	Dentjres
159	109	452	320	429	56	92
503	347	Pre-School Children 904	510	681	254	5

Speech therapy service

1971 began with the equivalent of 10.8 speech therapists and speech therapist/audiologists, and ended with 13. This increase was partly due to taking over the responsibility for speech therapy coverage at the new special schools (previously training centres) and the speech therapist working in these schools automatically joined the staff.

In addition to the new special schools, the School Health Service was also asked to provide speech therapy and, where necessary, audiology, at Shawgrove School for the partially sighted, Ewing School and Whitworth nursery assessment unit. In the latter two schools, 28 period joint assessments were carried out with psychologists, medical officers and teachers culminating in case conferences and, where required, continued speech therapy. These joint assessments were welcomed, as speech and language difficulties cannot be treated in isolation, and are bound to influence, or be influenced by, the child's personality, maturation and educational attainments.

Currently an application for an increased establishment is being considered. This has become necessary because of the growing demand for the services of the speech therapists. Since the establishment was increased to 12 in 1960, the number of children treated has increased from 1,071 in 1960 to 2,144 in the current year, and the total attendances have increased from 14,033 to 20,331.

As the number of children referred increased from 1,105 in 1970 to 1,263 this year, so the number of children awaiting therapy increased, from 205 in 1970 to 235 in 1971 and more children were suspended, 151 in 1970 to 424 in 1971. The latter are children who have had therapy or have been interviewed but have had to be left without help for periods from one to nine months due to lack of staff or time. As the major increase in those suspended was at special schools, an attempt was made to help these children and parents of children awaiting therapy by giving parent guidance sessions to advise parents how best to help their children until therapy is available.

A most encouraging trend was the fact that well over a quarter of the total referrals were for children under five years. These early years are of vital importance to the development of normal speech and language and often help given at this stage can obviate the need for therapy later and prevent disruption and difficulties in school.

The number of children under treatment at the end of the year was 1,498, an average of 115 per therapist. This is more than double an 'ideal' case load. In addition, many children required therapy more than once a week, especially those who came into the physically handicapped language disordered and educationally sub-normal categories.

The number of children discharged increased from 484 in 1970 to 759 in 1971. One hundred and twenty of these were in special schools compared with 43 in 1970, indicating that given adequate help, much improvement could be expected in the speech and language of these children.

When called upon, therapists screened children in schools. This year 449 children were seen of whom over a half needed to be referred for speech therapy.

As in previous years, clinical training was given to speech therapy students from the Elizabeth Gaskell College. In 1971 this amounted to 742 student clinical sessions.

Speech therapists/audiologists continued to assess children both at, or referred for admission to, Ewing, Shawbrook and Whitebrook schools, and also in the pre-school centre at Shawbrook. At the latter, 188 children were referred for audiological assessment of whom 99 were from maternity and child health clinics and school health clinics, 30 from special schools and day nurseries, and 59 from speech therapists. Of those referred, a number continued to have guidance or supervision at the centre, in their homes, or in day nurseries or nursery classes. In addition to those children found to have a hearing loss, or where nothing abnormal was detected, a high proportion of those assessed had speech and language disorders.

Number of children	School Clinics	Special Schools	Audiology	1971	1970
Total Referred	717	175	371	1263	1105
School M.O.	359	7	—	366	573
Teachers	116	105	213	434	336
M. & C.W.	97	1	99	197	57
Speech Therapists ..	55	61	59	175	42
by: Relatives	32	—	—	32	28
G.P.'s	23	—	—	23	14
Dept. of Aud.	9	—	—	9	9
Child Guidance	4	—	—	4	9
Others	22	1	—	23	37
Referred UNDER 5 ..	203	22	150	375	—
TREATED	1220	707	217	2144	1806
CASE LOAD	735	587	176	1498	1322
DISCHARGED	485	120	154	759	484
Treatment Complete ..	228	60	—	288	206
Ceased Attendance ..	91	3	—	94	192
Did not attend Interview ..	62	—	13	75	192
Refused Therapy	19	—	—	19	—
Left School at 15	7	17	—	24	—
Left Area	56	14	—	70	56
T.N.N./unsuitable	26	25	109	160	39
INTERVIEWED	497	136	—	633	508
Screened.. ..	290	159	—	449	405
Referred	128	103	—	231	—
TOTAL ATTENDANCE ..	9477	9931	923	20331	15321
TOTAL DID NOT ATTEND..	3929	351	16	4296	3546
WAITING LIST.. ..	225	10	—	235	205
SUSPENDED OVER 1/12 ..	106	318	—	424	151
PARENT GUIDANCE.. ..	61	91	—	152	—
VISITORS	107	100	—	207	140
STUDENT SESSIONS ..	551	148	43	742	636
VISITS	274	15	42	331	383
PARENTS EVENINGS ..					
and TALKS	11	8	—	19	17
JOINT ASSESSMENTS ..	—	28	—	28	—
REFERRED TO OTHER ..					
SPECIALISTS	—	—	17	17	—
REFERRED TO SPEECH ..					
THERAPISTS	—	—	12	12	—
EAR MOULDS.. ..	—	—	95	95	360

Child guidance service

The arrangement initiated in 1971 for maintaining liaison with the School Psychological and Child Guidance Service continued. The Senior Medical Officer in the Family Guidance Service held regular consultations with the Principal Educational Psychologist to discuss children attending the centres who were considered by the psychologists to have medical problems. Arrangements were made for the parents to discuss these problems with the Medical Officer and further investigations were arranged when necessary with the consent of the general practitioners.

Education Welfare Officers also consulted the Medical Officer about children who were truanting or refusing to attend school. In appropriate cases interviews were arranged. The Medical Officer is also a member of the team who discuss the suitability of pupils for admission to the Alice Briggs Hostel for Maladjusted Boys. Reports on the boys in attendance at the hostel were received and discussed by the team.

The Senior Medical Officer also attended a co-ordinating committee meeting to help problem families in each area of the city. In many cases further medical advice and treatment was arranged. Children were also referred for convalescent treatment.

Special clinics

Haemoglobin clinic

The total number of children referred to the clinic this year was somewhat lower than in previous years. This was due in part to a falling off in referrals in February and March when every available school medical officer was seconded to immunization duties following the diphtheria outbreak which occurred at that time. It was noticeable that more referrals per week came through in the latter part of the year.

Although 413 children were referred, only 209 actually attended the clinic. Of these 102 were new cases.

When a child failed to attend, a second appointment was sent. If this failed to produce an effect, a school nurse was asked to make a home visit. Where this measure failed, the child was discharged for non-attendance. The school medical record was endorsed to this effect and the child was examined at the next school medical inspection.

During the year 7 children were referred to hospital for further investigations. One child was found to have coeliac disease, and, since commencing a gluten free diet, has become very much fitter. Two of the hospital referrals were not anaemic but were referred for chest X-ray. During the year 99 cases were discharged.

Skin clinic

No cases of ringworm of the scalp were reported in Manchester schools in 1971.

Enuresis clinics

During the year children suffering from enuresis continued to be treated by school medical officers at six specialist clinics.

Number of children treated during the year	491
Number discharged :	
Symptom free	73
Improved	53
Unassessable due to failure to complete attendance	188
Number remaining under treatment :	
Improved	130
Showing no improvement to date ..	47
Number awaiting treatment at 31.12.1971 ..	294
Total clinic attendances during the year ..	1,190

Urine survey

During the year arrangements were made for samples of urine to be collected from children shortly after their first school medical examination. These samples were examined in the Public Health Laboratory at Withington Hospital to determine the incidence of urinary infection. The results were forwarded to the School Health Department, and children found to have urinary infection were referred for treatment to school clinics or with their general practitioner's approval to hospital.

The number of children examined in this way during the year was as follows:—

No. of specimens taken	No. referred to hospital	No. referred to school clinics
3441	212	41

Ear, nose and throat clinic

The work of the E.N.T. Department of the Central clinic during 1971 has been hindered by various factors which had the effect of reducing the number of attendances. These included the postal strike, the diphtheria outbreak, during which routine medical inspections at school etc. were suspended, staff shortages due to illness in the early part of the year and change of clerk with the attendant delays. In addition, many appointments which were sent out were not delivered due to housing demolition with changes of address. As a result, although there were almost as many appointments offered—3,120 in 1971 as compared with 3,250 in 1970—the actual attendances at the Clinic were well down from 2,217 to 1,834. However, in spite of this the position with regard to the waiting list for new appointments has improved considerably and new cases are now seen within a few weeks of the referral, certainly within a month and there is a similar position in regard to reviews, both short term and long term. This is most gratifying when one recalls the long waiting lists of only a few years ago. There has also been a most satisfying reduction in the waiting list for operations at the end of the year 1971—71 cases waiting as compared with 249 at the end of 1970. As envisaged in the 1970 report, this is due to the new theatre block at Booth Hall Hospital with additional E.N.T. sessions and the increasing numbers admitted to the Jewish Hospital.

A comparison of the numbers on the waiting list for operation from this department, during the past few years may be of interest. There has been a steady improvement, most marked in 1971 :—

1966	..	..	..	..	408
1967	..	..	..	..	311
1968	..	..	..	..	268
1969	..	..	..	..	263
1970	..	..	..	..	249
1971	..	..	..	..	71

An analysis of the attendance at the Central clinic is as follows:—

Attended	Suspected deafness		Otorrhoea		Other conditions		Total
	New	Old	New	Old	New	Old	
1970	216	593	69	274	492	573	2,217
1971	287	722	33	87	322	383	1,834
Did not attend							
1970	104	219	23	149	240	251	986
1971	168	625	30	83	130	250	1,286
Notified							
1970	361	896	69	500	741	693	3,250
1971	455	1,347	63	170	452	633	3,120
Average attendance :	1970—68·21 per cent 1971—59·21 per cent						

There has been a notable increase in the number of new cases of suspected deafness referred to this department during the past year. This has not been particularly noted in the out-patient clinics elsewhere e.g. at Booth Hall Hospital and in the writer's opinion is a tribute to the constant vigilance at the various centres, rather than any actual increases in deafness amongst school children.

The continued co-operation of the Hearing Aid Clinic at Hardman Street is again very much appreciated, as is also the constant help we receive in special audiological investigations and especially impedance tests. However, we are faced with the problem of the constantly increasing numbers of audiograms which have to be carried out with the limited facilities of the staff available for the purpose and the consequent delay. Whilst obviously it is important to test new cases as soon as possible, nevertheless, it seems to me equally important to repeat the audiogram in children undergoing treatment in order to assess their progress and delay is being experienced in both categories. Comparison of the figures is given:—

	1970	1971
Total number of cases referred for audiogram from various departments	1,215	1,143
Number referred from the E.N.T. Dept. ..	222	263

Parents of children with speech defects frequently ask if removal of tonsils and adenoids would help, and this has directed interest to the problems of speech defect in children and the extent to which oto-laryngologists can assist with diagnosis and treatment of this distressing condition. Figures for the prevalence of speech defects in childhood vary from 14 per cent of five year old children with severe defects in articulation (Morely) to 20·9 per cent boys and 15 per cent girls of seven year old children considered to have below average oral ability (Pringle et al). The problem is therefore considerable but paradoxically very little instruction about speech disorders is given to nurses, health visitors, social workers, dentists and medical students. Ingrams Clinical Classification (abbreviated) is in the following table:—

1. Disorders of vocalization (dysphonia).
2. Disorders of respiratory co-ordination (dysrhythmia).

3. Disorders of speech sound production with dysfunction or abnormality of tongue, lips, teeth or palate (dysarthria).
 - (a) due to neurological abnormality
 - (b) due to local abnormality—jaws, teeth, tongue, palate, lips etc.
4. Disorders due to mental defect, hearing defects, true dysphasia psychiatric disorders, etc.
5. Developmental speech disorder syndrome.

Without going into detail there are certain aspects which are in the province of the E.N.T. Department, e.g. dysphonia may be associated with chronic or recurrent laryngitis, related to upper respiratory tract infection, over use of the voice as in excessive shouting and papilloma of the larynx. Here laryngoscopy is indicated. Dysrhythmia (stammering or stuttering) is outside our province but dysarthria with defective articulation due to neurological or anatomical abnormalities of the lips, tongue, or palate or their related structures e.g., as in cleft palate, hypoglossia, mal-occlusion of the jaws, palatal dysproportion or obstruction of the nasal airway is certainly within it. It should be noted here that tongue tie is a very uncommon cause of tongue disorder. Secondary speech disorders where the motor and sensory functions of the lips, tongue and palate etc. appear to be normal include hearing impairment, particularly where it is severe in the higher frequencies. These children are characteristically slower to learn to speak than normal children and particularly slow to learn to articulate S, Sh, P and Th sounds. Audiological investigation is essential where deafness is suspected by the history or there are suspicious clinical features. In the developmental speech disorder syndrome a minority of the most severely affected children not only have difficulty in comprehending speech but also non-speech noise in their environment. They may appear to hear intermittently and may respond to quite quiet sound whereas loud sound results in no response. Such children have been said to suffer from central deafness, and have been called non-communicate by Murphy (1964). It is hardly surprising therefore that a significant proportion of very severely affected patients find their way into a School for the Deaf.

Speech with palatal dysfunction:

The palate plays such a significant part in the production of normal speech that its dysfunction can destroy the quality of speech to the point of being indistinguishable. Early indication of the incompetence of the palatopharyngeal sphincter before the development of speech include obvious cleft lip or palate, nasal regurgitation of milk, difficulty in sucking and swallowing, choking attacks and nasal snorts, and possible neurological lesions or muscle flaccidity may be suspected. A team of specialists will be involved including neurologists, the plastic surgeon, the E.N.T. surgeon, the orthodontist and speech therapist. The problem of severe nasal escape may even require a pharyngoplasty. Nasal speech is a misleading label meaning different things to different people, with confusion between rhinolalia aperta (excessive nasal resonance), rhinolalia clausa (insufficient nasal resonance) and rhinolalia mixta (mixture of both). The inability to form an effective sphincter also shows itself by inability to gargle, whistle and blow up a balloon and the likelihood of recurring otitis media with hearing loss should be remembered. Adenoidectomy often reveals an unrecognized submucous cleft palate or a congenitally short palate, the normality of speech prior to surgery being due to a pseudo-sphincter made possible by the pad of adenoid tissue. From what has been said it will be apparent that the

question of adenotonsillectomy and more especially adenoidectomy is not easily answered. Whilst on the one hand removal of adenoids may clear nasal obstruction and improve speech, on the other hand an incompetent palato-pharyngeal sphincter may result and careful diagnosis is necessary.

I would like to express my appreciation of the speed and efficiency with which hearing aids are issued through the Hardman Street Clinic to our children referred there. In 1971 twelve aids were issued, slightly fewer than in 1970 when sixteen were issued. We are also grateful to the X-ray department of Booth Hall Hospital who carry out our X-rays and an analysis of the numbers and types is given below:—

	1970	1971
Sinus only	184	242
Sinus and mastoid	—	1
Sinus and chest	7	5
Sinus and lungs	8	—
Sinus and head	10	—
Mastoid only	2	—
	<hr/> 211	<hr/> 248

The total number of operations carried out on patients referred from this department at Booth Hall Hospital and the Jewish Hospital this year was 758 as compared with 761 in 1970 and an analysis of the operations is given below:—

Operations carried out at Booth Hall Hospital:

	1970	1971
Tonsils and adenoids	431	398
Tonsils, adenoids and antral lavage	29	50
Adenoids only	12	31
Antral lavage, antrostomy, proof puncture \pm ads.	120	81
Minor ear operations—aspiration, myringotomy grommets	119	90
Examination under microscope	10	2
Nasal diathermy, nasal cautery	23	10
Major ear operations	3	2
Removal of granulations and polypi	7	—
Sub-mucous resection	—	2
	<hr/> 754	<hr/> 666

Jewish Hospital:

Tonsils and adenoids	3	72
Grommets, antral lavage etc.	4	20
	<hr/> 7	<hr/> 92
	<hr/> 761	<hr/> 758

As mentioned above the waiting list for operations at the end of 1971 has been considerably reduced and details are as below :—

Waiting list December 31st, 1971					1970	1971
Tonsils and adenoids	..	..	..	..	151	32
Adenoids only	..	..	..	..	54	8
Adenoids, antral lavage	..	..	..	..	6	1
Aspiration of ears, grommets	..	..	..	..	31	24
Examination under microscope	..	..	..	..	2	1
Nasal diathermy, nasal cautery	..	..	..	..	4	2
Myringoplasty	..	..	..	..	1	2
Direct laryngoscopy	..	..	..	..	—	1
					249	71

Audiology clinic

This clinic continues to provide an invaluable service to “the hard of hearing” school child.

The clinic, run by a specially trained sister and medical officer undertakes pure tone audiometry on all children capable of co-operating. An impedance audiometer has just been added to the diagnostic equipment, and should prove very useful in providing a quick and simple measure of middle ear disease.

For the young or slower child the facilities of the clinic for the pre-school child at Shawbrook School, under the skilled care of a school medical officer, an audiologist and a teacher, give added help to the early diagnosis of hearing problems, so essential to the development of clear speech and full participation in activities.

Ophthalmic clinic

The consultant Ophthalmologist, Mr. P. L. Blaxter attended the Central Clinic for one half day session weekly to hold a specialist clinic. An analysis of the cases seen and treatment prescribed is shown below.

Squint	..	..	320	Cataract	..	..	2
Phoria	..	..	1	Epicanthus	..	..	1
Myopia	..	..	18	Miscellaneous	..	..	1
Astigmatism	..	..	1	Coloboma	..	..	1
Nystagmus	..	..	8	Anisometropia	..	..	6
Treatment prescribed							
Orthoptic	..	..	..	..	..	..	38
Operative	..	..	..	..	..	..	76
Observation	..	..	..	..	..	..	181
Discharged to Local Clinic	..	..	..	..	..	..	58
Discharged to Royal Eye Hospital	..	..	..	..	..	..	6

Orthoptic service

Sessions were held by the orthoptist at six school clinics, in schools, special schools and day nurseries. Special emphasis is placed on the assessment of the visual acuity of children suffering from physical handicaps and for this purpose the three schools catering for these children were visited several times and in addition children suffering from amblyopia ex anopsia were treated. Diagnostic sessions for the assessment of the visual acuities of certain children who present difficulties in co-operation were held twice in each of the four special schools previously known as junior training centres. Similar sessions were held at the two day schools for educationally retarded children aged three to seven years.

Four nursery schools were also visited in addition to twenty-three day nurseries.

Visits to all schools and nurseries proved to be beneficial and interesting in so far as defective vision had in a number of cases not been suspected by the parents. Reports on children with defective vision and those suffering from squints were sent to Mr. Blaxter, the Consultant Ophthalmologist. The appropriate treatment was then advised: viz: correction of refractive errors by ordering glasses, intensive orthoptic treatment and surgery where this was indicated.

Special clinics for handicapped children were held by Mr. Blaxter at the Royal Eye Hospital. When appropriate children were referred to him at the Central School Clinic.

The number of attendances during 1971 were:—

	<i>No. of sessions</i>	<i>Attendances</i>
Byrom Street	136	123
Woodhouse Park Clinic	23	169
Moston Lane Clinic	10	89
Levenshulme Clinic	11	101
Ancoats Clinic	12	109
Northern Moor Clinic	3	17
Telford School	2	9
Lancasterian School	4	29
Crosby Meadow School	1	7
The Birches School	2	27
Leacroft School	1	7
Piper Hill School	1	4
Haveley Hey Nursery School	3	47
Oldwood Nursery School	2	40
Crossacres Nursery School	3	49
Mayfair Nursery School	4	78
White Moss Special School	2	9
Mill House Special School	2	18
Margaret Barclay School	1	12
Bostock Hall School	1	11
23 Day Nurseries		
Average number of children tested at each nursery	20	
Total number:	496	
Those seeing normally:	437	
Those with defective acuity:	59	
Those with squints:	50	

Orthopaedic treatment

Treatment for minor defects requiring remedial exercises was given at several school clinics and special schools by physiotherapists and details of this work is included in the "School Clinics" section.

Children with more serious defects were examined by the consultant orthopaedic surgeons at their weekly attendances at the out-patients clinics attached to the Lancasterian and Telford schools for physically handicapped children. Remedial treatment, including hydrotherapy, was carried out by the physiotherapists on the instruction of the consultants. When operative treatment was considered necessary arrangements were made for this to be carried out at Booth Hall and Wythenshawe Hospitals.

Mr. J. D. Evans, consultant surgeon visiting the Lancasterian school and clinic reports as follows:—

"This year has been a most active year at the Lancasterian Special School. The number of referrals from school clinics has increased and many interesting conditions have been picked up during these clinics. The activity of the Physiotherapy Department has again been concentrated on treatment of spina bifida children with a lesser number of spastic children appearing as new cases. One demonstration class for senior physiotherapists from Withington was held during the year and this was well attended and is to be repeated."

Mr. R. A. Brown visiting consultant surgeon to the Telford School and Clinic makes the following statement on the year's work:—

"During the year the physiotherapy work has been hampered by lack of staff, the essential work has, however, been carried out uninterrupted by the superintendent physiotherapist and a senior physiotherapist. Latterly there have been four additions to the staff.

Clinics have been held alternate Thursdays of in- and out-patient children.

Children have continued to be referred to Booth Hall Hospital for consultations and operations. The co-operation of the Orthopaedic and Pediatric consultants there is much appreciated.

On the 23rd June, 1971 the department acted as host to the doctors attending the course on Developmental Pediatrics, sponsored by the University of Manchester Department of Child Health and the Post-graduate Medical Institute, University of Salford, when a lecture demonstration of 'The Orthopaedic Problems in Spina Bifida' was conducted.

Concern about the ultimate placement of children leaving the school remains. Twelve children left the school during the year. Three are in full-time work, one child with limited intelligence is at home, two children have been transferred to normal schools, five children have moved house, and have been transferred to the Lancasterian and Peter House Schools, and one child (with Freidrick's Ataxia) is now attending Hereward College, Coventry.

Several children sat the C.S.E. examinations with considerable success."

The following table shows details of the work carried out at the orthopaedic centres :—

	Lancasterian		Telford		Total
	School	Clinic	School	Clinic	
Number of children treated	170	85	108	198	561
Total attendance	17,324	390	12,034	321	30,069
Number of examinations by surgeon..	343	233	85	177	838
Number referred to hospital	20	9	13	22	64
Number of treatments given :					
Individual exercises and stretching..	13,475	325	7,431	79	23,310
Group exercises	2,067	—	1,051	—	3,118
Plaster of paris for correction of de- formities	4	—	—	1	5
Electrical treatment, infra red and ultra violet ray	98	10	—	58	166
Postural drainage	40	10	—	4	54
Hydrotherapy	852	—	224	—	1,076
Pre-school spina bifida treatment ..	—	55	—	—	55
Other treatments	127	—	58	—	185
Remedial exercises :					
Individual	1,647	—	3,086	—	4,733
Group	1,684	—	1,051	—	2,735
Analysis of cases treated :					
Foot defects	—	31	—	101	132
Deformity of toes	—	12	—	21	33
Knees and ankles	—	12	—	23	35
Spinal deformities (other than spina bifida)	—	6	7	5	18
Cerebral palsy	77	5	48	26	146
Spina bifida	39	2	33	4	78
Congenital deformities (including thalidomide).. ..	1	—	6	—	7
Muscular dystrophy	4	—	9	—	13
Osteochondritis	4	5	2	5	16
Miscellaneous	37	11	6	10	64

Margaret Barclay School

Fifty children attended this school during the year, 43 resident and 7 day pupils, where they received physiotherapy treatment as required under the direction of the visiting consultant orthopaedic surgeon.

The following table gives an analysis of the children's defects:—

Spastics (Cerebral Palsy)	21
Spina Bifida	17
Muscular Dystrophy	6
Arthrogryphosis	2
Post-Poliomyelitis	1
Infantile Dystrophy	1
Cerebellar astrocytoma	1
Renal osteopathy	1

Mr. J. D. Evans, visiting consultant surgeon, reports:—

"This year in the physiotherapy Department of the Margaret Barclay school, some changes of staff have been seen but the work has remained at its usual high standard. The number of cases treated shows the amount of work which is carried out here. No special problems have arisen but under the guidance of the new superintendent physio-therapist further activities in the department are envisaged."

Mrs. M. Hendley, the superintendent physiotherapist has made the following report upon the year's work:—

"The seven day pupils create a small flurry of activity as they arrive and join the residents streaming down from breakfast in the 'house', to commence the day's round of school and therapy activities.

The physiotherapy Department treats all 50 children who form our total complement of lively and mostly cheerful young people. Each of them requires that the therapists pay considerate attention to their personality as well as to their handicaps, and, as each of them presents different and highly individual problems—and promise, our work is stimulating and often rewarding.

There have been some changes in the staff of the department, but it is hoped that the quality of treatments has been maintained in the Margaret Barclay tradition. One or two developments have taken place which are intended to direct our efforts towards consideration of the needs of the 'whole child'. In particular, the presence of the Head-teacher at our clinics has already proved valuable.

It is hoped that we may shortly begin a regular and systematic assessment of the progress of each pupil. This will ensure a clearer and possibly earlier identification of problems which need specific care and treatment. The approach is guided to a considerable extent by a wish to underpin, to an even greater extent than previously, the daily activities and school-work of the children, by work within the physiotherapy Department.

The physiotherapists are particularly grateful for the opportunity of close co-operation with the teaching staff in the treatment of physical difficulties which may be associated with spatial problems and those of disordered body image.

We are very conscious of the ready co-operation of the Matron, and the Headteacher and their staffs, and of the speech therapist. There is little doubt that this close co-operation and co-ordination of the professional disciplines represented on the staff will ensure the maximum, albeit steady and unhurried, progress in the abilities of our children."

Chiropody

An additional clinic was opened on the north side of the City bringing the total number of clinics to 10.

The number of treatments given was 8,339, an increase of 206 over the previous year.

Corrective foot appliances continued to be made by chiropodists of this department at Withington Hospital. The statistical details are as follows:—

Number of new cases	..	..	..	..	..	82
Number of re-inspections	..	..	..	..	..	783
Total number of treatments	..	..	..	..	..	865
Number of inlays prepared	..	..	..	..	..	228
Number of insoles prepared	..	..	..	..	..	32
Toe prop appliance	..	..	..	..	..	1

Convalescent treatment

Convalescent treatment is provided at the Dr. Garrett Memorial Home, Conway, which is administered by the Manchester Health Department.

Children were recommended because of general debility or for convalescence following operations or specific illnesses.

During the year 1,475 children were referred, the majority by school medical officers and the remainder by hospital consultants, general practitioners and medical officers of the Family Health Service. The number of children admitted was 980. Two recommendations were transferred to other authorities for children living outside Manchester. At the end of the year 204 children were awaiting treatment. 289 parents withdrew their consent for their children to avail of this treatment and of these only 32 notified the department.

The following table shows the number of children admitted to the Dr. Garrett Memorial Home during 1971 :—

Number of children in residence at 1st January, 1971	..	86
Number of children admitted during 1971	.. ..	979
Number of children discharged during 1971	.. ..	987
Number of children in residence at 31st December, 1971		79

The number of children discharged includes 25 who were taken home against the advice of the visiting Medical Officer.

The Invalid Children's Aid Association placed one child at Taxel Edge Home, Whaley Bridge Of the 980 children who received convalescent treatment 117 were under five years of age.

Maternity and child health

Arrangements have continued for children under school age to be treated for certain defects at school clinics. During the year 154 children between the ages of one and five years were treated.

Orthopaedic defects	..	..	..	81
Defective vision	..	..	..	14
Ear defects	..	..	..	1
Speech defects	..	..	..	24
Debility	..	..	..	1
Skin conditions	..	..	..	21

In addition 12 children received ultra-violet light treatment. Details of dental treatment given to expectant mothers and young children under the joint scheme for dental provision as required by the National Health Service Act, 1946 are given in the report on the school dental service.

Tuberculosis

The School Health Department is informed of all school children who are notified to the Medical Officer of Health. During 1971, fourteen children of school age were notified. Of these, twelve suffered from pulmonary lesions, one of whom was sputum positive. School contacts were investigated. In addition, one child suffered from tuberculosis of a finger and another from cervical adenitis. Close co-operation with the Manchester Chest Clinic and the consultants at the various hospitals continued.

Dr. Robinson, Consultant Chest Physician at the Chest Clinic, has provided the following information :—

Number of children aged 0–14 years examined	..	3,918
Number of children aged 0–14 years notified	.. ..	23
Number with respiratory tuberculosis	.. .. ..	21
Number of school children who received B.C.G. vaccination	.. .. .. ..	197

Mass radiography

The mass radiography service continued to carry out the X-ray examination of students entering colleges of education, students leaving the six Manchester colleges of education, newly appointed teachers and existing teaching staff of the Education Committee. A total of 2,843 X-ray examinations was carried out.

Immunization programmes

Vaccination against tuberculosis

B.C.G. vaccination was offered to all children who had attained the age of 13 years at the beginning of the school year. A total of 8,229 children were skin tested, of whom 5,865 gave negative reactions. The positive reactors were X-rayed at the Chest Clinic under arrangements made with the Consultant Chest Physician.

B.C.G. vaccinations were given to 5,835 children.

Immunization against diphtheria and tetanus

Immunization was continued throughout the year and children whose parents had consented were immunized by school medical officers either at school or clinics.

Due to the outbreak of diphtheria in early February, immunization was offered to all school children in the City.

A total of 71,627 children were immunized, of whom 10,293 completed a primary course and 61,378 received booster doses.

Vaccination against poliomyelitis

Oral vaccination was carried out during the year for children requiring protection against poliomyelitis. Parents of all children attending primary schools were invited by letter to give consent to their children receiving full vaccination or a reinforcing dose of vaccine as necessary.

Arrangements were then made for nurses to visit the schools and the appropriate doses were administered on sugar cubes. Absentees from school at the time of the nurses' visits received appointments at school clinics.

Primary vaccination was given to 745 children and 3,387 received booster doses.

Vaccination against Rubella

In accordance with the recommendations issued in July, 1970 by the Department of Health and Social Security, vaccination against german measles was offered to 6,936 school girls in the age group 12½–14 years. 4,444 consents were received, i.e. 64 per cent of parents consented to their daughters being protected against german measles.

The number of girls vaccinated was 4,181.

Miscellaneous medical examinations

All staff newly appointed to the Education Committee's service were required to satisfy the Principal School Medical Officer as to their medical fitness. In all cases a questionnaire was completed giving a statement of medical history. Where indicated, a medical examination and chest X-ray were carried out. This procedure was also followed in the case of new members of non-teaching staff of the University Institute of Science and Technology, a charge being made to the University for this service.

At the request of the Manchester and Salford City Police, persons applying for employment as school crossing patrol wardens were given hearing and vision tests in addition to completing a questionnaire.

In accordance with the requirements of the Department of Education and Science arrangements were made for the medical examination of students completing courses at Manchester Colleges of Education and for Manchester students entering Colleges in Manchester and elsewhere. Teachers entering the profession for the first time from industry or commerce were also examined. Entrants to non-teacher training courses at Elizabeth Gaskell College, Hollings College and the College of Nursery Training, also completed a medical questionnaire.

Staff suffering from disability or prolonged ill health were medically examined, and where indicated, a recommendation was made for retirement on medical grounds.

Statistical details are as follows:—

New appointments

Teachers

Total number questionnaires received	380
Total number medical examinations	143

Non teaching staff

*Total number questionnaires received	934
*Total number medical examinations	50
School Crossing Patrols hearing and vision tests	81

Staff retiring through disability

Medical examinations	32
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Students entering Colleges of Education

Medical examinations	650
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Students leaving Colleges of Education

Medical examinations	1,549
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Students entering other Colleges

Total number questionnaires received	460
Total number medical examinations	10

* Includes University of Manchester Institute of Science and Technology personnel.

Employment of children

In accordance with the City of Manchester bye-laws, schoolchildren over the age of thirteen wishing to work part-time out of school hours, are issued with a licence by the Education Committee, provided that they have been medically examined by a school medical officer to ascertain their physical fitness.

During the year 1971, 1,385 children were examined and ten applications were refused.

Several children were found to have minor defects which required treatment in local school clinics and probationary licences were issued until treatment was completed.

Forty-seven of the licences were issued to children who were employed in entertainment, and the remainder to children employed on newspaper and milk rounds.

Infectious diseases

The accompanying table shows the incidence of infectious diseases occurring in school children, as reported by Headteachers on the weekly returns made to this department. Reference is made elsewhere in the report to the outbreak of diphtheria in February and March which was controlled by the mass immunisation of children in attendance at all schools in the City.

In common with other parts of the country Manchester suffered a mild outbreak of viral meningitis beginning in June and the number of school children affected is shown in the table.

The practice of arranging for nurses to examine the school contacts of children suffering from impetigo and scabies continues. No case of ringworm of the scalp was reported during the school terms. Close liaison is maintained with the Public Health Inspectors and the Public Health Laboratory in the control of intestinal infections.

School Returns 1971

	Jan.	Feb.	Mar.	April	May	June	July	Sep.	Oct.	Nov.	Dec.	Total
Measles	40	32	65	58	162	222	209	52	135	97	70	1,142
Whooping Cough ..	97	82	58	21	14	9	4	3	5	7	4	304
Scarlet Fever	8	8	15	6	5	6	8	5	8	20	15	104
Scarletina	3	9	5	3	14	6	8	3	13	5	2	71
Chickenpox	83	112	148	127	148	164	208	66	140	145	156	1,496
German Measles.. ..	77	136	189	216	359	267	338	29	68	27	52	1,858
Mumps	28	30	39	36	57	81	91	20	128	166	244	920
Diphtheria	—	6	—	—	—	—	—	—	—	—	—	6
Poliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—
Meningitis	1	2	—	—	—	4	10	3	3	3	2	28
Dysentery	—	1	3	1	12	25	3	2	4	4	2	57
Enteritis	1	8	11	10	4	2	—	10	10	4	2	62
Food Poisoning	1	—	1	1	1	—	—	—	2	—	19	25
Infectious Jaundice ..	26	11	1	4	4	8	6	11	12	6	8	97
Glandular Fever	2	3	5	5	7	—	5	3	5	1	2	38

Infections of the Skin

Ringworm Scalp.. ..	—	—	—	—	—	—	—	—	—	—	—	—
Body ..	1	3	2	1	—	—	—	—	2	2	—	11
Impetigo	35	17	29	18	20	40	19	44	75	41	22	360
Scabies	38	34	37	26	19	38	21	48	90	40	25	416

Handicapped children

Reference was made in the report for 1970 to the awareness that the majority of handicapped children suffered from multiple handicaps and the special educational treatment involved close liaison between members of the different disciplines. Early diagnosis and advances in treatment gave these children a greater opportunity to develop their potential.

The Education (Handicapped Children) Act 1970 came into effect in April 1971, when children in attendance at the four junior training centres were transferred to the education department. In Manchester this has not resulted in any major administrative changes within the School Health Service, as for many years the routine medical examinations of these children have been carried out by school medical officers. Children requiring physiotherapy and speech therapy are now treated by the staff of this department. Dr. Brennan, Director, Calderstones Hospital, continued to act as consultant and held regular clinics at one of the schools for children referred by school medical officers, headteachers and parents. Arrangements were made for a number of children to be admitted to Calderstones Hospital because of behavioural difficulties and uncontrolled epilepsy.

Towards the end of the year, an assessment unit for children of pre-school age was commenced at Whitworth School for E.S.N. children, which is situated in an area of the city where a number of socially deprived children live. The aim is to give children who present with symptoms of retardation a period of observation by a team which includes a school medical officer, speech therapist, teacher and educational psychologist. The present period of assessment is one term and the first report showed that this early continuous assessment resulted in children being placed in the appropriate school and remedial help given from an early age. Emphasis was placed on the development of language and the diagnosis of children suffering from minimal brain dysfunction.

The schools for the physically handicapped continued to admit an increasing number of children suffering from spina bifida. This increased the work of the school nurses and much thought was given to the use of improved appliances for the incontinent. The physiotherapists under the direction of the consultant orthopaedic surgeons maintained close liaison with the teaching staff. Representatives from the surgical appliances firms visited the schools regularly. A school medical officer visited Crumpsall Open Air School weekly. The recent trend in the type of disability from which children in attendance suffer continued, 62 per cent of the children suffered from asthma and bronchitis. The remaining miscellaneous group included those suffering from cardiac defects, brain damage following road traffic accidents, fibrocystic disease and glandular defects. Two children suffered from sickle cell anaemia. Children admitted because of emotional problems gave rise to concern as their behaviour had an adverse effect on the progress of the truly delicate children. The full time school nurse continued to visit the homes of children to advise parents on the care of the children.

A supervisory clinic was held by a senior school medical officer for those children suffering from epilepsy and who attend ordinary schools. Each child was seen at regular intervals and advice and guidance were given to teachers and parents.

Children suffering from frequent attacks which interfered with their education were admitted to Soss Moss School. Nursing and medical care were provided by matron and her deputy, who are qualified nurses, the local general practitioner in association with the Consultants. The senior school medical officer visited the school at regular intervals.

A peripatetic service for the visually handicapped children in attendance at ordinary schools was commenced. It was supervised by the Headmaster of Shawgrove school for partially sighted children. The educational progress of these children was reviewed by peripatetic teachers and free exchange of information was maintained between the educational staff and the School Health Service.

A school medical officer attended the pre-school clinic for the partially hearing and close liaison continued with the staff of the Peripatetic Educational Service for the partially hearing children in attendance at ordinary schools.

A medical officer also carried out the medical examinations of the non-communicating children who attended the Ewing School for assessment.

Disinfection of plimsolls

Each year a service is provided for the disinfection of plimsolls used on a communal basis for physical education in day schools and this continued in 1971.

The plimsolls were collected during the midsummer holidays and taken to the Health Department's disinfection station at Monsall Hospital. After treatment the shoes were returned to schools before the re-opening for the Autumn Term. Twenty-seven schools availed themselves of this service and over 4,800 pairs of plimsolls were treated.

Health education

The health education programme in both primary and secondary schools continued to increase. Head teachers throughout the city are becoming more and more aware of helpful talks the health visitors can give.

Every endeavour was made to run courses throughout the academic year and in conjunction with the ordinary school programme. These were very acceptable to teaching staff and to the children who attended. Interest was assessed by the questions asked.

Besides the usual basic programme on mothercraft, general and personal hygiene, talks were given on the dangers of drugs, smoking and venereal disease.

Co-operation with general practitioners and hospitals

Throughout the year family doctors were informed whenever a child patient on examination by a school medical officer was considered to be in need of hospital treatment, or a consultant's opinion. This has been the practice for some years, the family doctor being given the choice of making the appointment, or agreeing to this being undertaken by the School Health Service. Where the latter was agreed, a copy of the hospital report was sent to the family doctor.

During 1971, 557 children were referred for hospital treatment and in all but 13 cases the family doctor agreed to the School Health Service making the necessary arrangements.

School medical officers undertaking routine medical examinations of school entrants found that many children had received treatment before reaching school age. Reports about such children were readily supplied by the consultants concerned.

Department of Education and Science
Annual Returns

Year Ended 31st December, 1971

Part I—Medical Inspection of Pupils Attending
Maintained Primary and Secondary Schools
(Including Nursery and Special Schools)

Table A
Periodic Medical Inspections

Age Groups Inspected (By year of birth) (1)	Number of pupils who have received a full medical examination (2)	Physical condition of pupils inspected		Number of pupils found not to warrant a medical examination (5)	Pupils found to require treatment (excluding dental diseases and infestation with vermin)		
		Satisfactory Number (3)	Unsatisfactory Number (4)		for defective vision (excluding squint) (6)	for any other condition recorded at Part II (7)	Total individual pupils (8)
1967 and later	945	941	4		15	172	181
1966	2,654	2,634	20		88	569	612
1965	3,712	3,679	33		192	869	971
1964	1,847	1,824	23		91	463	513
1963	538	531	7		55	211	246
1962	241	238	3		37	98	123
1961	198	194	4		47	103	131
1960	180	178	2		40	73	100
1959	1,695	1,654	41	1,906	252	522	658
1958	1,074	1,055	19	985	194	304	424
1957	2,181	2,176	5	11	284	277	515
1956 and earlier	3,980	3,966	14		692	600	1,106
	19,245	19,070	175	2,902	1,987	4,261	5,580

Table B
Other inspections

Number of Special Inspections	..	..	..	..	..	..	..	..	22,989
Number of Re-inspections	..	..	..	..	..	..	..	..	13,475
						Total	..	..	36,464

Table C
Infestation with Vermin

Total number of individual examinations of pupils in schools by school nurses or other authorised persons	..	..	..	..	..	..	..	..	337,562
Total number of pupils found to be infested	..	..	..	..	..	..	..	..	17,733
Number of individual pupils in respect of whom cleansing notices were issued (Section 54(2) Education Act 1944)	..	..	..	..	..	..	..	..	884
Number of individual pupils in respect of whom cleansing orders were issued (Section 54(3) Education Act 1944)	..	..	..	..	..	..	..	..	448

Part II—Defects Found by Periodic and Special Medical Inspections during the Year

This table shows the number of pupils found to require treatment (T) and the number of pupils found to require observation (O).

Defect or Disease						Periodic Inspections				Special Inspections
						Entrants	Leavers	Others	Total	
Skin					T	233	247	161	836	6,893
					O	138	62	36	236	42
Eyes (a) Vision .. .					T	425	940	622	1,987	1,651
					O	576	410	257	1,243	1,301
(b) Squint .. .					T	310	36	126	472	291
					O	239	24	144	407	463
(c) Other .. .					T	54	20	51	125	1,151
					O	64	13	26	103	12
Ears (a) Hearing .. .					T	194	60	89	343	694
					O	204	24	46	274	87
(b) Otitis Media .. .					T	221	61	66	348	148
					O	452	46	108	606	116
(c) Other .. .					T	82	79	68	229	1,377
					O	63	10	32	105	4
Nose and Throat .. .					T	485	71	147	703	655
					O	786	64	147	997	139
Speech .. .					T	180	17	76	273	119
					O	215	8	63	286	54
Lymphatic Glands .. .					T	8	—	1	9	9
					O	68	3	9	80	21
Heart .. .					T	34	8	19	61	29
					O	257	26	54	337	85
Lungs .. .					T	146	50	88	284	59
					O	244	64	63	371	75
Developmental (a) Hernia .. .					T	36	2	3	41	16
					O	102	9	9	120	27
(b) Other .. .					T	52	21	46	119	61
					O	281	14	23	318	59
Orthopaedic (a) Posture .. .					T	10	5	16	31	9
					O	38	3	5	46	11
(b) Feet .. .					T	96	48	60	204	31
					O	183	40	23	246	44
(c) Other .. .					T	74	55	72	201	34
					O	155	39	27	221	28
Nervous System (a) Epilepsy .. .					T	15	15	22	52	33
					O	24	12	13	49	20
(b) Other .. .					T	30	18	28	76	10
					O	33	11	15	59	14
Psychological (a) Development .. .					T	96	41	63	200	54
					O	134	11	64	209	67
(b) Stability .. .					T	128	60	132	320	91
					O	330	105	165	600	134
Abdomen .. .					T	29	15	22	66	20
					O	64	32	26	122	35
Other .. .					T	158	157	150	465	10,372
					O	114	87	85	286	51

Part III—Treatment of Pupils attending Maintained Primary and Secondary Schools

(Including Nursery and Special Schools)

Table A

Eye Diseases, Defective Vision and Squint

External and other, excluding errors of refraction and squint	..	..	..	1,334
Errors of refraction (including squint)	..	..	..	3,798
				<hr/>
Total	..	..	5,132	<hr/>
Number of pupils for whom spectacles were prescribed	..	..	..	1,651

Table B

Diseases and Defects of Ear, Nose and Throat

Received operative treatment :

(a) for diseases of the ear	..	..	..	..	..	..	..	139
(b) for adenoids and chronic tonsillitis	..	..	..	..	..	..	..	1,271
(c) for other nose and throat conditions	..	..	..	..	..	..	..	165
Received other forms of treatment	..	..	..	..	..	..	..	2,116
								<hr/>
Total	..	..	..	..	..	..	..	3,691
								<hr/>

Total number of pupils in schools who are known to have been provided with hearing aids :

(a) in 1971	..	..	..	..	..	..	..	..	..	22
(b) in previous years	..	..	..	..	..	..	..	..	..	58

Table C

Orthopaedic and Postural Defects

(a) Pupils treated at clinics or out-patients departments	..	..	..	..	751
(b) Pupils treated at school for postural defects	..	..	..	..	—
					<hr/>
Total	..	..	..	..	751
					<hr/>

Table D

Diseases of the Skin**(Excluding uncleanliness, for which see Table C of Part I)**

Ringworm :

(a) Scalp	..	..	..	..	..	..	..	..	..	..	..
(b) Body	..	..	..	..	..	..	..	..	..	..	..	4
Scabies	..	..	..	..	..	..	..	..	..	..	..	1,168
Impetigo	..	..	..	..	..	..	..	..	..	..	..	384
Other skin diseases	..	..	..	..	..	..	..	..	..	..	..	4,600
												<hr/>
Total	..	..										6,156
												<hr/>

Table E

Child Guidance Treatment

Pupils treated at child guidance clinics	1,000
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Table F

Speech Therapy

Pupils treated by speech therapists	2,325
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Table G

Other Treatment Given

Pupils with minor ailments	10,911
Pupils who received convalescent treatment under School Health Service arrangements	980
Pupils who received B.C.G. vaccination	..	..	..	..	..	..	..	..	..	..	..	6,023
Others :												
Chiropody	..	..	..	..	..	..	..	..	..	..	..	2,419
Haemoglobin	..	..	..	..	..	..	..	..	..	..	..	209
Ultra violet ray treatment	..	..	..	..	..	..	..	..	..	..	..	291
Disinfestation	..	..	..	..	..	..	..	..	..	..	..	3,705
Poliomyelitis vaccinations	..	..	..	..	..	..	..	..	..	..	..	4,132
Measles vaccinations	..	..	..	..	..	..	..	..	..	..	..	55
Rubella vaccination	..	..	..	..	..	..	..	..	..	..	..	25
Immunisation—Triple Antigen	..	..	..	..	..	..	..	..	..	..	..	666
Immunisation—Diph/Tet.	..	..	..	..	..	..	..	..	..	..	..	70,674
Immunisation—Diphtheria	..	..	..	..	..	..	..	..	..	..	..	295
Immunisation—Tetanus	..	..	..	..	..	..	..	..	..	..	..	44

Part IV—Dental Inspection and Treatment
Carried out by the Authority

Attendances and Treatment

	Ages 5 to 9	Ages 10 to 14	Ages 15 and over	Total
First visit	8,154	7,291	1,254	16,699
Subsequent visits	9,167	14,180	3,081	26,428
Total Visits	17,321	21,471	4,335	43,127
Additional courses of treatment commenced	599	671	135	1,405
Fillings in permanent teeth	7,254	19,698	5,408	32,360
Fillings in deciduous teeth	6,827	511	—	7,338
Permanent teeth filled	5,349	15,498	4,150	24,997
Deciduous teeth filled	5,476	453	—	5,929
Permanent teeth extracted	1,444	4,259	896	6,599
Deciduous teeth extracted	14,600	4,010	—	18,610
General anaesthetics	4,782	2,856	270	7,908
Emergencies	783	607	123	1,513
Number of pupils X-rayed	—	—	—	1,332
Prophylaxis	—	—	—	4,662
Teeth otherwise conserved	—	—	—	2,200
Number of teeth root filled	—	—	—	73
Inlays	—	—	—	32
Crowns	—	—	—	75
Courses of treatment completed	—	—	—	14,918
Orthodontics				
New cases commenced during year	—	—	—	405
Cases completed during year.. .. .	—	—	—	230
Cases discontinued during year	—	—	—	85
No. of removable appliances fitted	—	—	—	525
No. of fixed appliances fitted.. .. .	—	—	—	54
Pupils referred to Hospital Consultants	—	—	—	7
Prosthetics				
Pupils supplied with F.U. or F.L. (first time)	2	—	4	6
Pupils supplied with other dentures (first time)	10	124	54	188
No. of dentures supplied	12	124	58	194
Anaesthetics				
General anaesthetics administered by dental officers	—	—	—	4,229
Inspections				
First inspection at school: No. of pupils	—	—	—	30,343
First inspection at clinic: No. of pupils	—	—	—	14,235
No. found to require treatment	—	—	—	30,901
No. offered treatment	—	—	—	30,294
Pupils re-inspected at school or clinic	—	—	—	3,643
No. found to require treatment	—	—	—	2,067
Sessions				
Sessions devoted to treatment	—	—	—	8,075
Sessions devoted to inspection	—	—	—	197
Sessions devoted to Dental Health Education	—	—	—	113

Part V—Staff of the School Health Service

Table A

	Number of Officers	Number in terms of full-time officers employed in the School Health Service
Medical Officers (including the Principal School Medical Officer and Deputy) :		
Whole-time school health service	8	8·0
Part-time school health service and rest of time local health service	4	0·8
Part-time School Health Service rest of time as General Practitioner	7	2·6
Part-time School Health Service rest of time on other medical work	12	5·2
Ophthalmic specialists	5	1·3
Other consultants and specialists	4	0·6
Senior speech therapist	1	1·0
Speech therapists	17	12·5
Chiropodists	4	1·4
Orthoptist	1	0·6
Physiotherapists	18	15·0
Remedial gymnast	1	1·0
Number of school clinics	—	21

Table B

School Dental Service

Staff of the School Dental Service

	Number in terms of full-time officers employed in the school dental service			
	Number of Officers	Employed on admin. duties	Clinical duties School Service	M. & C.W. Service
(a) Officers employed on a salary basis :				
Principal school dental officer	1	0.5	0.4	0.1
Dental officers	12	0.2	11.2	0.6
(b) Officers employed on a sessional basis :				
Dental officers (including orthodontists) ..	22	—	6.2	0.3
Totals (a) and (b)	35	0.7	17.8	1.0
(c) Dental auxiliaries and hygienists :	Full-time equivalent			
	Number	Treatment		
		School Service	M. & C.W. Service	
Dental auxiliaries	4	3.6	0.4	
(d) Other staff :	Number		Full-time equivalent	
Dental technicians	4		4.0	
Dental surgery assistants	27		25.4	

School Dental Clinics

	Static Clinics				Mobile Clinics	
	Number with one surgery only	Number with two or more surgeries	Total number of surgeries		Total number of surgeries	
			Avail-able	In use	Avail-able	In use
Provided directly by Authority	10	6	22	22	2	2

Treatment was given at five residential schools.

Dental Health Education

Dental auxiliaries and health visitors visited schools with 10,000 pupils and maternity and child welfare centres to give talks, demonstrations and films. 4,662 had prophylaxis treatment and dental health and chairside instruction.

Table C

Type of examination and/or treatment provided at the school clinics

Examination and/or treatment	Number of school clinics (i.e. premises) where such treatment is provided	
	Directly by the Authority	Under arrangements made with hospital authorities
Minor ailment and other non-specialist examination or treatment	17	—
Audiology	2	—
Chiropody	9	1
Ear, Nose and Throat	1	—
Enuretic	6	—
Ophthalmic	10	—
Orthopaedic	2	—
Orthoptic	6	—
Physiotherapy	5	—
Remedial exercises	5	—
Speech Therapy	13	—
Sunray (U.V.L.)	3	—
Vaccination and immunization	16	—
Haemoglobin	1	—

Table D

Child Guidance Clinics and the School Psychological Service

Number of child guidance clinics provided by the Authority5

	Number employed		Aggregate in terms of the equivalent number of whole-time officers			
	by L.E.A.	under arrangements with hospital authorities	employed by L.E.A.		employed under arrangements with hospital authorities	
			in child guidance clinics	in school psychological service	in child guidance clinics	in school psychological service
Psychiatrists	2	1	1.1	—	0.2	—
Educational psychologists	12	—	7.0	3.4	—	—
Psychiatric social workers	5	—	5.0	—	—	—
Social workers	4	—	3.0	—	—	—
Remedial teachers	24	—	—	22.0	—	—
Special teachers	8	—	—	—	—	—

APPENDIX ON SOCIAL SERVICES

Services transferred from the Health Department on 25th May, 1971, under the Local Authorities, Social Services Act, 1970

The commentaries refer only to the period 1st January to 25th May, 1971

Day nurseries

The number of day nurseries administered by the Health Department was 22, providing places for 1,023 children.

Two permanent purpose-built day nurseries were opened during April. Heybury Close, Beswick, replaced the war-time prefabricated building at Barmouth Street and an additional new nursery was opened at Carisbrook Street, Harpurhey.

A further new nursery was nearing completion at Longhurst Road, Higher Blackley.

Average daily attendance during the period compared with average for 1970, was as follows:—

		<i>Average daily attendance</i>
1970 .. .. .	..	796
1st January to 25th May, 1971	..	854

At the date of the transfer of the service 522 children were awaiting admission to 18 nurseries. This number included 88 children who had been accorded priority; 74 of these were in the Moss Side district of the City awaiting admission to the Alexandra Park day nursery.

Daily charges for admission remained unchanged, i.e. 60p daily for non-priority and 20p for priority cases. In certain instances children admitted for priority reasons were granted free places for varying periods.

The admission of medical/social priority children continued at the same level as in 1970 and in May 1971, 377 children were attending as follows:—

Mentally subnormal	37
Emotionally disturbed	161
Physically handicapped	80
Medical parental causes	99

Medical officers continued their routine medical inspections and immunization programmes.

Staff employed at 25th May, 1971, numbered 242 compared with 254 at the end of 1970. The recruitment and retention of nursery nurses improved and 54 were on the staff at date of transfer, compared with 42 in December, 1970.

Thirteen nurseries are approved for the training of nursery students and 45 Health Department sponsored students were taking the two-year training course for the Nursery Nurse Examination Board Certificate.

Staff in various grades continued to avail themselves of courses at Fielden Park College of Further Education.

Home help service

The establishment of home helps remained at 201 whole-time staff working a 40-hour week, and 300 part-time staff working a 22-hour week or less.

Recruitment of staff

The turnover in personnel is always high and seven full-time helps were appointed and 17 resigned; 39 part-time helps were appointed and 29 resigned. Twenty-two sessional helps were appointed and 11 resigned.

Night-sitting and holiday service

The provision of help for these cases was arranged on three occasions for a total four nights.

The organising staff visited 2,261 households during the period. These included visits to applicants requesting help for the first time, to homes where help was being provided and to the homes of prospective home helps.

Sources of new applications

<i>Sources</i>	<i>Cases of acute sickness, old age and Infirmity</i>	<i>Confinement cases</i>
Medical practitioners	300	1
Medico-social workers	162	2
Welfare Services Department	131	—
Personal application	84	7
Health visitors and staff of maternity and child health centres	158	7
Home Nursing Service	62	—
Department of Health and Social Security	45	—
Council of Social Service	10	—
Members of City Council	6	—
Children's Department	3	—
Mental Health Services Division	2	—
Chest Clinic	1	—
	<hr/> 964	<hr/> 17

The number of households assisted is detailed in the following table:—

	<i>No. of households</i>
Persons under 65 years:—	
Chronic sickness and tuberculosis ..	350
Maternity, including expectant mothers ..	8
Others	179
Persons 65 years and over	3,323
	<hr/>
	3,860
	<hr/>

Details of the type of cases attended by home helps are given in the following analysis of new cases attended in the period:—

	<i>No. of cases</i>
Old age and infirmity	183
Diseases of the circulatory system	123
Rheumatism	70
Post-operative disorder	30
Diseases of the respiratory system (other than tuberculosis)	49
Other illness	76
Blindness or other physical handicap	24
Confinement.. .. .	6
Malignant neoplasm	30
Vascular disease of the central nervous system..	24
Psychological disorder	6
Pulmonary tuberculosis	—
Problem families	—
	<hr/>
	621
	<hr/>

Langho Colony

(Administered and maintained by the Manchester City Council, under the terms of Part III of the National Assistance Act, 1948 and amendments)

On the 25th May, 1971, there were 238 male and 185 female residents: of these, 114 were chargeable to the Corporation of Manchester, and 309 chargeable to other Authorities. In addition to admissions from the Manchester area, applications for admission were received from all parts of the country.

The following table of statistics refers to the residents in the Colony to the 25th May, 1971 :—

				<i>Males</i>	<i>Females</i>	<i>Totals</i>
Admissions..	..	..	..	14	3	17
Re-admissions	..	..	..	12	13	25
Discharges ..	..	..	..	24	18	42
Deaths	..	..	..	6	2	8

The total number of epileptic seizures during the period 1st January to 25th May, 1971, was 5,143, classified as follows :—

				<i>Severe</i>	<i>Slight</i>	<i>Totals</i>
Males ..	..	..	..	1,708	1,596	3,304
Females	..	..	..	707	1,132	1,839
Totals ..	..	..	..	2,415	2,728	5,143

Knowle House

There is accommodation for 22 mothers and 16 babies. There were 27 new cases admitted ; 18 were expectant mothers, six were mothers with babies one of whom was requiring shelter and three were recuperating mothers. Of the expectant mothers admitted in the ante-natal period, two returned to Knowle House with their babies.

Admissions and discharges were as follows :—

			<i>Number in the home on 1st January, 1971</i>	<i>Admissions (including re- admissions)</i>	<i>Discharges</i>	<i>Number in the home on 25th May, 1971</i>
Babies ..	..	..	4	9	10	3
Mothers ..	..	..	2	6	4	4
Expectant mothers			5	18	17	6
Recuperating mothers			1	3	4	—

Mental health services

Adult training centre staff

Centre	Chief training officer	Manager	Senior instructors	Instructors	Attendants	Clerks
Blackley ..	1	1	4	13	2	2
Wythenshawe ..	—	1	4	13	2	2
Totals ..	1	2	8	26	4	4

Mental subnormality and severe subnormality

The number of mentally retarded patients on the waiting list for admission to hospital was 66, all severely subnormal. This includes 32 patients who are accommodated by the Manchester Regional Hospital Board in special accommodation.

Type, age and sex distribution of patients awaiting hospital admission
Subnormal and severely subnormal persons

Time on waiting list	Males						Females						Totals
	Under 16			16 and over			Under 16			16 and over			
	(a)	(b)	(c)	(a)	(b)	(c)	(a)	(b)	(c)	(a)	(b)	(c)	
Over 2 years.. .. .	1	18	—	2	7	—	6	10	—	7	8	—	59
1 to 2 years	—	2	—	—	—	—	1	—	—	—	—	—	3
Under 1 year	—	—	—	—	2	—	—	2	—	—	—	—	4
Totals.. .. .	1	20	—	2	9	—	7	12	—	7	8	—	66

- (a) Cot and chair cases
- (b) Ambulant severely subnormal
- (c) Ambulant subnormal

Social histories and reports on patients and their home circumstances

Type of report	Males		Females		Totals
	Under 16	16 and over	Under 16	16 and over	
Social history	10	19	9	14	52
Progress reports	—	7	—	1	8
Leave of absence reports relating to examination of need for continued detention	1	1	—	—	2
Totals	11	27	9	15	62

Subnormal and severely subnormal persons admitted to psychiatric hospitals

Method of admission	Males		Females		Totals
	Under 16	16 and over	Under 16	16 and over	
Informal	—	5	1	1	7
Emergency	—	—	—	—	—
Observation	—	—	—	—	—
Treatment	—	1	—	—	1
Hospital order	—	4	—	—	4
Short term care	13	3	6	6	28
Totals	13	13	7	7	40

Mental illness

No mentally ill persons were on the waiting list for admission to hospital on 25th May, 1971.

Mentally ill persons admitted to psychiatric hospitals through the mental health service

Method of admission	Males		Females		Totals
	Under 16	16 and over	Under 16	16 and over	
Informal	—	31	—	36	67
Emergency	—	17	—	34	51
Observation	—	31	—	42	73
Treatment	—	5	—	2	7
Hospital order (section 60) ..	—	5	—	3	8
Hospital order (section 65) ..	—	—	—	—	—
Totals	—	89	—	117	206

Disposal	Males		Females		Totals
	Under 16	16 and over	Under 16	16 and over	
Informal	—	29	—	53	82
Treatment	—	—	—	—	—
Discharged	—	14	—	17	31
Died	—	—	—	—	—
Not completed	—	5	—	6	11
Totals	—	48	—	76	124

There were 16 patients dealt with on behalf of other local health authorities, 10 of whom were admitted to hospital.

Informal patients comprised 80 per cent of all admissions.

Work in the community

Mental illness

Prevention, care and after-care

	Males	Females	Totals
Social histories	7	7	14
Number of initial visits	141	191	332
Number of continued visits	816	1,004	1,820
Removed from care	107	131	238
Referred for medical report :— to general medical practitioner	28	35	63
to psychiatrist or clinic	42	34	76
Interviews with other agencies, departments or employers	339	379	718

Notification of mental illness

Source of notification	Males		Females		Totals
	Under 16	16 and over	Under 16	16 and over	
General medical practitioners ..	—	62	—	85	147
Hospitals and clinics	—	36	—	49	85
Police authorities	—	20	—	17	37
Other corporation departments ..	—	9	—	22	31
General public	—	4	—	2	6
Other sources	—	47	—	70	117
Totals	—	178	—	245	423

Disposal of cases notified

Type of disposal	Males		Females		Totals
	Under 16	16 and over	Under 16	16 and over	
To hospital	—	89	—	117	206
Referred to other departments or agencies	—	19	—	25	44
Home visits	—	29	—	45	74
No further action	—	41	—	58	99
Awaiting disposal at 25.5.71 ..	—	—	—	—	—
Totals	—	178	—	245	423

Day centre and club

The day centre and club and the integrated day care facilities at the two hostels, Forrester House and Plymouth House, continued the work of rehabilitating patients from the hostels to the community.

The evening club, "Club 70", operated at the day centre on Monday and Thursday evenings of each week, when attendances averaged 25 both evenings.

The staff of the day centre was as follows :—

- 1 Caseworker adviser
- 1 Group therapist-in-charge
- 1 Group therapist
- 1 Part-time instructor (domestic subjects)
- 3 domestic staff

Subnormality and severe subnormality

Details of the number of subnormal and severely subnormal persons referred are as follows :—

Males		Females		Total
Under 16	16 and over	Under 16	16 and over	
6	13	5	8	32

Removal from care

There were 28 subnormal and severely subnormal persons removed from care.

Number of persons receiving care in the community by the Mental Health Service at 25th May, 1971

Mental illness and psychopathic disorders				Subnormality and severe subnormality				Total
Males		Females		Males		Females		
Under 16	16 and over	Under 16	16 and over	Under 16	16 and over	Under 16	16 and over	
—	949	—	1,147	201	517	178	488	3,480

The total number of visits by mental welfare officers was 4,630.

Adult training centres

Number of trainees on registers at 25th May 1971

Training centre	Males	Females	Totals
Blackley	69	83	152
Wythenshawe	84	95	179
Totals	153	178	331

Both centres have places for 100 males and 100 females.
The average attendance at the adult training centres was 73 per cent.

Residential accommodation

The number of residential places now available is 118, consisting of 32 places for children at the Northenden Residential Unit, 28 places for adult male subnormals at Summerhill Hostel, 29 places for mentally ill women at Forrester House, and 29 places for mentally ill men at Plymouth House.

The staffing of the Hostels is as follows:—

Staff	Summerhill	Forrester House	Plymouth House	Northenden residential unit
Superintendent (resident)	1	1	(on course)	1
Matron (resident)	1	—	1	—
Assistant superintendent (resident)	1	1	1	1
Assistant matron (resident)	1	—	1	—
Assistant matron (non-resident) ..	—	1	—	—
Night attendants	—	—	—	4
Children's attendants (part-time) ..	—	—	—	20
Cooks	1	2	2	2
Domestic assistants (part-time) ..	2	2	2	2
Handymen (part-time)	1	1	1	1
Laundress/seamstress	—	—	—	1

Northenden Residential Unit virtually closed to admissions from 16th January, 1971 to 24th May, 1971, due to Sh. sonnei dysentery and there were four admissions for short-term care during the period. At 25th May, 1971, 25 children were in residence.

The total number of admissions and discharges at Summerhill, Forrester House and Plymouth House was as follows:—

Admissions

Reason for admission	Summerhill	Forrester House	Plymouth House	Totals
Discharged from hospital	1	4	14	19
Incompatible home	1	—	4	5
Behaviour disorder	—	—	—	—
No home	6	4	1	11
Short term care	3	—	—	3
From Gaskell House (o. p. clinic)	—	—	2	2
Totals	11	8	21	40

Discharges

Reason for discharge	Summerhill	Forrester House	Plymouth House	Totals
To private accommodation	1	3	12	16
To relatives	1	2	1	4
To hospitals	2	—	3	5
Own discharge	2	1	4	7
Unsuitable	—	—	2	2
To home ex short-term care.. ..	3	—	—	3
To residential employment	1	—	—	1
Totals	10	6	22	38
Number of residents at 25.5.71 ..	26	29	26	81

At Forrester House two residents were in employment on admission and a further two more were found employment during the period. At Plymouth House two were in employment on admission. At Summerhill two were in employment on admission and a further one was found employment.

At 25th May, 1971, eight residents at Forrester House were in employment, one was attending the Blackley Adult Training Centre, two were attending the Day Centre, 12 were attending the day care group at Plymouth House and six were seeking employment. At Plymouth House two residents were in employment, five were attending the Blackley Adult Training Centre, 11 were attending the Day Centre, four were attending the day care group at Forrester House and four were occupied about the hostel.

At Summerhill nine of the residents were in employment, five were seeking employment, seven were attending the Wythenshawe Adult Training Centre, four were occupied about the hostel and one was employed by the hostel.

Employment officer

A total of 23 patients was placed in employment.

Voluntary organisations

Residential accommodation was provided by various voluntary bodies for 15 mentally ill and 62 subnormal and severely subnormal patients and a further three patients were in foster homes provided under the aegis of the Guardianship Society Home. Short-term care was provided in voluntary homes in 36 cases to give relief to relatives of the subnormal and severely subnormal. The number of children attending voluntary training centres was 13.

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